

Manual of Phrenology.

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BRITISH PHRENOLOGICAL SOCIETY

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ESSAY I.

THE study of Phrenology constitutes the most interesting and important duty of the human being. The subject is no less than the HUMAN MIND; that part of our being imparting to us our distinctive character, and exalting man so highly in relation to the other created beings by which he is surrounded. In fact, it is this mind with which all society and its duties are concerned: it is by this mind that society is linked together or torn asunder: it is by this mind that we are enabled to fulfil the various duties connected with the varied relationships of society, whether these be those of servants, of masters, of rulers or of ruled, of parents or of children, of teachers or of taught. The human mind, wherever man passes, is man's perpetual companion. If he wants to hide himself from its operation, the very attempt to hide is a mental operation. In fact, the mind is to man an *omnipresent*. It is the source of his happiness and of his misery: it is the beginning and the end of all the superior actions connected with our existence: it is that which we train and develop from the ignorance and the helplessness of infancy into the knowledge and the wisdom, and the strength of manhood.

Many subjects are interesting, and afford much satisfaction in their investigation, but there can be no such subject so interesting as the mind itself. The mind, that takes notice of all other subjects, must be the most interesting of all subjects: the mind, in fact, being that which constitutes man, must be the highest study, since the saying "know thyself" is recognized by the general consent of antiquity, to be so excellent a maxim, as to have justified the locating of its first promulgator among the wise men of Greece.

It is not wonderful, therefore, that so many have been the attempts to investigate the mind itself: and no astonishment is felt on observing, that, in almost every period of the world's existence, individuals have existed who have delighted in observing its manifestations, and analyzing these when manifested. Two classes of individuals have investigated the mind: the first consisting of those who have described the phenomena of the mind: the second of those who have attempted to analyze and systematise these phenomena. The first will comprise those who are known under the name of moralists, divines, and poets. These, having laboured in giving accurate descriptions of character, have often succeeded in giving the most accurate portraits of mental states. But these are only intellectual and animal and moral portrait painters. They painted in print. They have done good so far: but they have not sought to penetrate into the constituents of the portraits which they have drawn.

The other class attempted to take this step. They proceeded to the analysis of the mental states themselves: they wished to develop the causes and the constituents of these mental states: but they made one fundamental mistake, namely, they began to compare themselves with themselves: they sat down in their studies, and reflected upon their own feelings and intellectual states, and arguing thence as to the intellectual states and feelings of all other men, fell into the most egregious blunders. They, in their abstractions, forgot the realities of life: or, if remembered by them, were cast aside as untrue, if not affording support to their particular creed. The consequence of this abstraction was most grievous; the mind became occupied with the most absurd questions, as the following extract from the writings of Dr. Thomas Brown will show. Referring to the questions which were discussed in the darkness of the middle ages, he describes the following:—Whether angels pass from one point of space to another without passing through the intermediate points? Whether they can visually discern objects in the dark? Whether more than one can exist at the same moment at the same physical point? Whether they can exist in perfect vacuum with any relation to the absolute uncorporeal void? And whether, if an angel were in vacua, the void could still truly be termed perfect?

With regard to the mind itself:—Whether its *essence* were distinct from its *existence*? Whether its *essence* might therefore subsist when it had no actual *existence*? And what are all the qualities inherent in it as a *nonentity*? In morals:—Whether ethics were an art or a science? Whether, if the mind had freedom of choice, this independence will be an entity or a quiddity? And whether we should say with a dozen schoolmen, that virtue is good because it has intrinsic goodness, or, with a dozen more, that it has this intrinsic goodness, because it is good?

The fundamental error of these men was, that they, instead of considering mental manifestation in connection with the corporeal parts with which those mental manifestations in this world are connected, viewed them in this isolated state, and not only thus viewed them, but in this isolated state regarded them as connected with their own minds. These men were intellectual Procrustes, who, if the facts did not meet their views, stretched them; if going beyond, lopped them; like their brother robber, who, when his victims were not long enough for his bed, stretched them to make them so; when too short, stretched them to make them sufficiently long. Here we obtain two points of fallacy.

A third class of mental students, which have come forward conspicuously, within the two last centuries, perceiving the errors into which these spiritualists fell, went into the opposite extreme, and began to look upon mere organization as the cause of all mental states. These individuals, partially right, did not travel far in their investigations, because they offended in their general deductions against opinions so generally prevailing in society, and thereby excited such an opposition, that one of the most talented, one of the proudest of them, felt himself obliged to bow, and,

frightened by the force of persecution, disavowed the sentiments which, shortly after the breaking out of the first French Revolution, he had boldly promulgated.

These, called the *materialists*, were not far wrong in their principle. The principal mistake consisted in inferring mental manifestations as *dependent upon* rather than *connected with* corporeal organization. They were too general in their remarks. They looked to the absolute size of the brain as their guide: but this turned out to be so fallacious, that they adopted many modifications of this particular opinion, and finally left the mind itself undelivered from the darkness with which it was invested.

The science of mind itself, therefore, obtained no *fixed principles*. The moralist, the poet, described *character*, in other words, *mind in its manifestations*, but went no farther: the metaphysician attempted a further step, namely, the *analysis of these manifestations*, but failed because he took his own mind as the standard by which to compare all other minds. The *materialist* also, not knowing that there was such a matter as *relative* size as well as *absolute* size of brain, and also that different parts of the brain have different duties associated with them, made little progress in mental investigations.

A fourth class of students of the mind has now arisen, and these are the *Phrenologists*. They have been pre-eminently successful. Their success is dependent, as every phrenologist has modesty and courage sufficient to declare, not upon any peculiar superiority of mind possessed by them over other men, but simply upon the circumstance, that the method that was adopted by them in the investigation of mental manifestation was the true one. Wherein is its truth, its superiority, over other previous modes of investigation? The answer is simple. The phrenologist studied *mind* and *matter* together: he investigated *manifestation* as connected with *organization*: he went upon the broad principle, that the more complicated the manifestations the more numerous the machines. While he maintained that the mind is connected with the brain, he maintained that *difference in manifestation* must be associated with *difference of organization* of the brain. It is true that the accidental observations of Gall, led to the development of this principle in reference to the mind, and its organ, the brain; but now the principle is recognized and held as a basis by every phrenologist.

The phrenologists, therefore, disregarding the spiritualism of the spiritualists, and the materialism of the materialists, but studying function with organization, have arrived at conclusions which every day's experience tends more fully to establish.

Viewing the labours of all these individuals, we may behold them as contemplating a watch. The moralists, the poets, and the divines described the movements of the minute and hour hands; the metaphysician reflected upon these motions without taking the trouble to look into the machinery; or if he did look into the machinery, he did not connect the machinery with the movement of the hands: whereas the phrenologist views the motion of the hands and the machinery together, and thus arrives at satisfactory conclusions.

Having thus pointed out, as briefly as is consistent with clearness, the different classes of individuals who have laboured to throw light upon the mind, it will be proper now to proceed to the examination of those principles upon which phrenology, as a science, is based.

The first principle that we have to notice is, **THAT THE BRAIN IS THE ORGAN OF THE MIND.**

It may be proper here to give a short description of the brain itself, its situation, and its appendages. The brain is situated within the cavity formed by that which is called *the skull*. Inside this bony covering there are three membranes or skins, the one the outermost being strong and thick, called the *dura mater*: the second, more internal, beautifully thin and transparent, called the arachnoid tunic; and the third, lying in direct contact with the brain, and enveloping it more closely, is called the *pia mater*.

The brain itself consists of two *hemispheres*, so that the brain is double as it were, forming an unity, however, the two half spheres being connected by a central band. The brain is divided into three lobes or rounded divisions, and occupies all the fore part, all the upper part of the skull, and a considerable portion of the back and lower part of the skull, down as far as the ridge or mark on the skull behind, which corresponds to a ridge internally, where a strong membrane is attached, separating the large brain, now spoken of, from the little brain, called the cerebellum, situated below this division.

The two hemispheres of the brain are separated one from another at the upper part, by a partition leading in a direct line and in a perpendicular position from the part corresponding nearly to the point of the nose, to the ridge already mentioned.

The large brain and the little brain each send off, as it were, two legs or branches, which unite together at the lower surface of the brain, and form the commencement of that which is called the SPINAL CORD, which extends all the way down the spine, being generally known by the name of *pith*.

Having thus described what the brain is, the principle will be examined.

The principle promulgated is, *That the brain is the organ of the mind*. The word organ is here made use of. By this word is meant simply that the brain is the part through which the mind *in this world* acts or works. The word organ comes from a Greek word *εργον* (ergon) which means *a work*: suppose, for instance, I will to lift this skull, I grasp it with my hand and lift it: now I say that my hand is the *organ of my will*, and no one would understand when I speak thus, that I mean *my hand is my will*, but merely that it is the part which my will makes use of to effect its *εργον* or work. So, when the phrenologist says that the brain is the organ of the mind, he by no means conveys that the *brain is the mind*. In fact, the phrenologist leaves the question of materialism or non-materialism quite untouched, except, so far as his influence extends, he endeavours to establish that the question is one which is, as yet, quite "beyond our ken," because no two persons are agreed what materialism is and what materialism

is not. He further endeavours to establish that much valuable time is wasted in disputing upon this point, and also that those who rest their belief in the immortality of man upon the supposed immateriality of the mind, build upon a sandy foundation, because the immortality of the mind is founded upon the will of the Creator, and not upon the materiality or the immateriality of its own constitution.

There is another term used frequently by phrenologists, namely, *function*. This is made use of to express the power of manifestation attached to any particular organ : thus we say that the function of the organ called the liver is to secrete bile : the function of the lachrymal glands to secrete tears ; of the salivary glands to secrete saliva ; and, so, with the other organs of the body.

Most men agree that the brain is connected with the mind. Dr. Doddridge taught that the soul was seated in the brain ; Woolaston, in his *Religion of Nature*, defended ; Grove, in his system of Moral Philosophy, taught the same thing ; and Bishop Brown, in his *Procedure of the Understanding*, argues that the brain is the organ of the mind, because the same becomes fatigued.

But it may be asked, *How is it to be ascertained that the brain is the organ of the mind ?* The answer is simple, and may, perhaps, be seen most naked in its simplicity, by presenting another question, *How do you know that you see with your eye ?* Let every one ask himself this question. “ Why, I see with my eye, that I do,” will the matter-of-fact man say : but the reflective man will inquire, and he will perceive that he sees with his eye, because whenever his eye is injured his sight is injured ; whenever his eye is closed his vision is closed ; whenever his eye is destroyed his sight is destroyed ; and he, perceiving this coincidence to be constant, infers, from this constancy of coincidence, causation. Now, suppose we find that a similar constancy of coincidence exists in reference to the state of the brain and the state of the mind, have not we a right to infer a similar causation ? In other words, suppose whenever the brain is injured the powers of the mind are manifested as injured : whenever the brain is imperfect, as in idiots, the mind is manifested as imperfect : whenever the brain is absent, there is no manifestation of mind, is it not right to conclude that the brain is the organ of the mind ?

In an attack made in the *Edinburgh Review*, some years since, by the celebrated advocate Jeffery, now Lord Jeffery, upon phrenology and phrenologists, the question was put forth, *Why not the mind in the heart, since the mind is injured when the heart is injured, and death ensues when the heart is wounded ?* The answer is very simple—Individuals have been born without brains, indeed without any heads, having only the face, but with hearts, and yet these individuals did not manifest any intellectual or other mental powers. And animals that have hearts like man, have not the same intellectual and moral powers : but they have differences in their brain, as the lengthened observations of Dr. Vimont have shown, in agreement with the deficiencies, as compared with man, of their mental manifestations.

It is true that cases have been recorded, in which individuals, who have lost a portion of their brain, have not been affected in their intellectual powers. But these cases are fallacious, as will be shown in the next Essay, and a most interesting case, having reference to this point, will then be related.

Having thus established the first proposition, That the brain is the organ of the mind, having explained many terms in connection with the same, it may be advantageous to proceed to the second proposition, namely, **THAT DIFFERENT PARTS OF THE BRAIN HAVE DIFFERENT FUNCTIONS.**

This proposition grows out of the former. It is the experimentum crucis of phrenology. The mind is one we all feel, its manifestations are several we also feel. This unity of mind is quite accordant with plurality of manifestation. It is quite accordant with many other analogical circumstances. Thus, life is one, but this life, acting through different organs, produces different results. Thus, acting through the liver, it secretes bile; acting through the lachrymal gland, tears; through the salivary glands, saliva.

So with the mind. The mind can be conceived as existing independent of a brain. But the mind cannot act in *this* world without a brain: and if it cannot act without a brain, is it not rational to infer that the different manifestations of mind must be dependent upon different functions, being possessed by different parts of the brain?

Phrenologists have discovered these, and the figures on Title, represent these various parts, commonly called *organs*, which may be viewed as so many receiving vessels of mind.

In these four figures it will be observed, that some of the organs are *blank*, some have *horizontal* lines, and some have *perpendicular* lines. These having *horizontal* lines are generally defined as organs of the *animal* feelings; those with *perpendicular* lines, organs of the *moral* feelings, and those which are *blank*, organs of the *intellectual* powers. These distinctions are not to be regarded as very philosophical, indeed it will be found, that, in these figures, some liberties have been taken in reference to classification, the reasons of which will be hereafter stated. The numbers attached to the several organs will be explained as the examination of the individual organs is proceeded with.

The discovery of these organs has been effected by the labours of Gall, Spurzheim, Simpson, Mackenzie, Crook, Hoppe, and others: and the evidence upon which the belief in their existence is based, may be prefaced with advantage by some analogical statements bearing upon the second general proposition.

In regard to these analogies, the first appeal is to be made to the *mechanical*. Look at the musical instrument called an *organ*. Are not its sounds, different and numerous as they are, produced by the same *wind* passing through *different pipes*? The sound is dependent primarily on the wind: the *differences* upon the *modifications* produced upon the wind in passing through the pipes through which it is transmitted. The wind may exist without the pipes, and the pipes may exist without the wind: in either case, the

wind would not be manifested in musical sounds: but when the wind acts through the different pipes, different sounds are produced. Yet no one supposes that the sounds are the result of *different winds*, but merely of the same wind existing in differently shaped pipes.

So, the mind, acting through the different parts of the brain, produces different mental manifestations: acting through those parts of the brain, situated *behind the forehead*, produces *intellectual* manifestations; acting through those situated at the *upper* part of the head, produces manifestations of the *moral* and *religious* feelings; acting through those parts situated *behind*, produces manifestations of the *animal* feelings.

But it may be objected that the various parts of the brain, called technically, *convolutions*, are so similar in structure, that it is difficult to conceive, that such opposite functions should be possessed by parts apparently so similar.

This objection, it will be perceived, is founded upon the assumption, that, in order to a difference of manifestation there must be to man a perceptible difference in structure, and that we are to be judges of that amount of difference which is necessary. This is a most absurd and daring assumption. Who, on looking at a grain of corn and at an acorn, would infer that the one would generate a stalk of wheat, and the other a splendid oak? But the assumption is daring; it proceeds upon the fallacy generated by our self-esteem, that our vision is so accurate as to enable us to perceive, with microscopic power, all the differences which exist. It is *man* telling the *Creator* that, if the Creator does not give him powers so as to be able to discover a difference in structure satisfactory to him, in accounting for the difference in function, he will not believe in the existence of difference in function.

But the objection can be met by a fact, which has been established as true, by an opponent to phrenology, Sir Charles Bell. This individual, who has sought opportunities to attack phrenology, and who shall have the honour of having his name recorded as one among many instances, in which men of talent have opposed the progress of truth, because "the light did not come in at their casements," has, by his experiments, established that that part which has been already referred to under the title of the *spinal cord*, is composed of *three* distinct columns, joined together so closely a little below the surface of the cord, that it is impossible to separate them. Sir Charles Bell has further satisfactorily demonstrated that the nerves, which arise from these three columns, have quite different duties, or functions. Those arising from the anterior or front column, communicating to the parts they supply the power of *motion*; those, arising from the posterior or back column, communicating to the parts they supply the power of *sensation*; and, those arising from the middle column, the *respiratory* power. Now these three functions, as possessed by the individual nerves, arising from these separate columns, are, it is evident, different from one another; but, yet Sir Charles Bell has never been able to discover any difference in the structure, either

of the nerves themselves, or of the columns whence they originate. to account for this great diversity of functions. The following are his own observations :—

“ If we take up a nerve to examine it, we find that it consists of
 “ distinct filaments ; but there is *nothing in these filaments to dis-*
 “ *tinguish them from each other*, or to declare their offices. One
 “ filament may be for the purpose of sensation ; another for mus-
 “ cular motion ; a third for the combining the muscles in the act
 “ of respiration. But the subserviency of each one of all these
 “ filaments to its proper office must be discovered by following it
 “ out, and observing its relations, and especially its origin in the
 “ brain and spinal marrow. In their substance there is nothing
 “ particular. They all seem equally to contain a soft pulp, enve-
 “ loped in cellular membrane, or pia mater, and so surrounded
 “ with a tube of this membrane, as to present a continuous track
 “ of pulpy nervous matter, from the nearest extremity in the brain
 “ to the extremity which ends in a muscle or in the skin.”—*The Nervous System of the Human Body, by Sir Charles Bell.*

What right then have we to assert that, because we cannot discern any palpable difference in the structure of the various parts of the brain, explanatory of the difference in their functions, that it is impossible that different functions can be connected with different parts of the brain ?

Another analogy, as connected with the *five senses*, may be referred to as satisfactorily demonstrating that a difference in structure not being perceptible to us, is not a justification of the denial of difference in function. It is well known that the power of vision is dependent upon the optic nerve, which supplies the eye and expands upon the back part of the eye : that hearing is dependent upon a nerve, called the auditory, which is spread over the internal parts of the ear : that smell is dependent upon the olfactory nerve, which is spread over the membrane which lines the nostrils : that taste is dependent upon another nerve, called the gustatory, which supplies the tongue. Now no person can show any difference in these nerves, which will explain the difference in their functions ; and yet this difference is acknowledged by all.

But if it be right to refuse credence in the one case, because a difference of structure is not perceptible, surely it is rational in the other case, in which the refusal is not sought or given.

ESSAY II.

THE preceding Essay was concluded by illustrations, having for their object, the demonstration that a want of a difference of structure, recognizable by human optics, does not at all justify the denial of a difference of function in parts, to those optics in appearance similar. These illustrations, drawn from the spinal cord, the five senses, and from other sources, were urged in reference to the difficulty, considered by many to exist in the circumstance, that the convolutions or parts of the brain are so similar in appearance, and yet so very different in function.

This second Essay cannot be commenced better than by adopting another method of demonstration in reference to the proposition now under consideration, namely, *That the different parts of the brain have different duties or functions* attached to them.

A THEORY which is nothing more or less than *a deduction or a series of deductions from facts*, is considered to be correct just in proportion as its principles are capable of being applied in explaining the facts connected with the theory. It will be therefore for us to consider whether the facts presented by the mind, in its manifestation, whether diseased or healthy, are explicable more satisfactorily upon the phrenological theory (that the mind acts through the different parts of the brain at individual times), or upon the other theory (that the mind acts through the brain as a whole): in other words, that, whenever the mind acts the whole brain is rendered active.

The facts connected with insanity, dreaming, variation in study, as affording mental relief, and also some in reference to injuries to the brain, will be brought forward in this investigation.

In regard to *insanity*,

An individual is very rarely universally insane. Indeed, every one, who has been in the habit of visiting establishments for the reception of the insane, must have felt astonished at the sanity of many individuals therein confined. So much has this feeling been awakened, that many have retired from these establishments with a deep conviction that the common opinion, that individuals are placed in these receptacles to gratify the avarice of rich uncles and cruel step-mothers, is justified by facts. This may be the case, but there can be no doubt that many persons who exhibit sanity for hours are insane. That is, a man will talk to you for some time with perfect rationality: and then, when his mind happens to be directed into the channel of his wanderings, his insanity becomes as evident as previously was his sanity.

Now, how can this be explained according to the theory, that *the mind acts through the brain as a whole*. It is impossible, because how can the brain be in that state at one moment so to

allow the exhibition of a sane state, and at the next moment of an insane state. Taking the phrenological theory, that the *mind acts through the different parts of the brain*, the solution of the contrariety is by no means difficult. Since, when the mind acts through the organs in the healthy state, the mind is exhibited sane: when acting through the organs that are in a diseased state, the mind is exhibited insane. Just, in the same manner, as the wind acting through the pipes of an instrumental organ, produces, when the pipes are sound, musically harmonious manifestations; when acting through the pipes that may be cracked, produces unmusical (cracked) manifestations.

But the difficulties connected with the theory, that the mind acts through the brain as a whole, are rendered more decidedly apparent, when these facts in insanity, which exhibit sanity in the *intellect*, but insanity in the *feelings*, are considered. I remember a patient, who imagined himself to be God Almighty; and who, in the exercise of his power, thought proper to give one friend Europe, another Asia, and a third America. Now, here insanity and sanity met together. The insanity was in the diseased activity of his organs of self-esteem and perhaps love of approbation; these, diseasedly active, made him believe that he was God. His reasoning powers, exercising themselves upon this belief, came, and that with the greatest sanity, to the conclusion, that he would give away these parts of the world. This *conclusion* was perfectly rational and sane: the *premises*, namely, the belief, was irrational and insane.

How can these phenomena be explained upon the theory that the mind acts through the brain as a whole? In other words, how could the brain at one moment be brought into a sane and an insane state, that is, the mind requiring the whole of it at each action? The transition must have been rapid indeed. But, taking the phrenological proposition, that the mind acts through different parts of the brain, we can readily understand how the mind acting through diseased self-esteem, should manifest itself in the belief of its possession that he is a God Almighty: and it is equally easy to understand how the healthy intellectual faculties, reasoning upon these unsound premises, authorized the individual to give away three of the quarters of the globe.

Many similar illustrations might be given, indeed so common are they, that the fact of their occurrence has been made use of by an opponent to phrenology to communicate his opinion of phrenologists, whom he has described as individuals, who, like the insane, *reason accurately upon false premises*. The only reply to this taunt is to ask the opponent of phrenology to state how a man can reason accurately upon false premises, the mind acting every time it acts through the brain *as a whole*: surely the state of the brain that is connected with the recognition of the false premises, cannot be the same state, at the same moment, developed, which is connected with the accurate reasoning.

The phenomena of *dreaming* are strikingly confirmatory of the phrenological proposition.

Dreaming, WHICH IS THE INSANITY OF THE SLEEPING, is generally the lot, at one time or the other, of almost every individual. It evidently arises from some portions of the brain being in a more active state than others, for children rarely dream.

To see the bearing that dreaming has on this proposition, a dream frequently occurring may be taken for illustration. I fancy myself crossing a bridge: a crowd is pushing against me with great violence; there are no balustrades to the bridge, and I am on the point of being precipitated into the river below. The horror occasioned produces a convulsive struggle, I wake, and find to my great satisfaction that I am on my bed, and resting my head upon a soft pillow. Now, in my dream, I had as firm a belief that I was on the brink of the bridge without balustrades and the crowd pushing me, as I now have when awaked, that I am safe on my pillow. How then is this belief to be explained? The answer is clear, if we adopt the phrenological principle, that the different parts of the brain have different functions; those parts of my brain which produce before the mind the perceptions of the bridge, the want of balustrades, the crowd pushing, are in a state of activity, or awake, while the other parts of my brain which would tell me where I really am, are asleep or in a state of inactivity. Now, directly I awake, that is, *bring the whole of the faculties into activity*, these latter become active, and they tell me where I really am. But this explanation cannot be afforded by the individual who maintains the theory that the mind, in all its actions, acts through the brain *as a whole*: the whole must be awake or the whole must be asleep: if the whole be awake the man cannot dream, if the whole be asleep, then also the man cannot dream.

The next point which may be referred to as illustrative of the accuracy of the phrenological proposition, is the *benefit connected with a change of study* in intellectual, and moral, and religious labours.

If we behold a horse standing in the street we find, that, when tired of standing on one leg he rests upon another, or varies his position. Why does he this? The answer is simple, He is tired of standing on this leg, or of this position. What does this, being tired, mean? Simply, that the muscles, which move the leg, or retain the leg in the position in which it was, have been kept in a state of activity for so great a length of time, that they require repose. But another set of muscles are ready to be called into action, and on these the horse can depend for another period of time: and thus he changes until the whole of his muscles are fatigued. But how much sooner would he become fatigued if the whole of his muscles in the act of standing were called into activity, or, at least into the same degree of activity.

To transfer these remarks to the faculties of the human mind. A person pursuing one branch of study, mathematics for instance, for two hours, becomes fatigued: he then turns his attention to *history*, his fatigue ceases. He reads history for two hours and his fatigue again returns: he then turns to *drawing*, and his fatigue again ceases, and, after pursuing drawing for two hours, fatigue

again takes possession of him. Here then is the occurrence of fatigue three successive times ; and not only the occurrence, but by the passing away of the fatigue three successive times, the mind being in activity all the while. How can this be if the mind acts through the brain *as a whole* ? It is impossible : because if the brain be fatigued once it must be fatigued altogether : you cannot take away fatigue by adding fatigue. *Plus* fatigue added to fatigue surely does not make *minus* fatigue. But taking the phrenological proposition, That the different parts of the brain have different duties to perform, it becomes evident at once, that as, in the one study, certain portions of the brain are rendered active, in the other, certain others, and in the third, certain others ; that the first class have repose while the second is active, and the second is in repose when the third series is active. Thus the cerebral organs become fatigued, and gain repose, and the mind is enabled to persevere in its exercisings. How satisfactorily, therefore, does the phrenological proposition enable us to explain the phenomena of mind.

The phenomena of *idiocy* afford still further evidence of the truth of the third proposition. Place an idiot's head beside the head of a Franklin, and the difference is so apparent, that every one acknowledges that the one is an idiot, and the other a being of intellectual power. Whence does this spontaneous acknowledgment arise ? Some at once assert from *physiognomy*. Oh no ! it is from *phrenology*. It is from the observation of the constant coincidence between the miserably low forehead and idiocy, and the well-expanded forehead and intellectual power. The conclusion that the one is an idiot and the other not so, is therefore an internal reasoning, in perfect accordance with phrenological principles. In fact, every man is, of necessity, a phrenologist.

A circumstance may be recorded here, which bears closely upon idiocy, as illustrative of the proposition now under examination. When I was an apprentice, my master was sent for to open a pauper who died in Cripplegate workhouse. This pauper was about thirty-two when she died, and was idiotic from the day of her birth to the day of her death. She never had shown any intellectual power : when she wanted any thing to eat, she made a sound like an animal : when she was displeased she made a most peculiar cry. I was appointed to open the head ; and, to my great astonishment, the instrument was buried in the skull before coming to any indication of brain. We forced off the upper part of the skull, and found, in the part of the skull, where the brain lying behind the forehead should be, no brain at all ; but a cavity, traversing which were bony bars, forming a kind of lattice work. I knew nothing of phrenology then : but when that science was first brought under my notice by a lecturer on anatomy, a Mr. Sleight, the case came vividly before my mind, and I at once perceived how strikingly the absence of those portions of the brain, situated behind the forehead, the organs of the intellectual powers, corresponded to the total want of intellectual manifestations on the part of the idiotic woman.

Another evidence in favour of the proposition, That different parts of the brain have different duties to perform, is afforded by the facts connected with *injuries to the head*, and *diseased conditions* of the brain.

It may be deemed singular to draw evidences from these sources, considered by most to afford evidences most decidedly unfavourable to the proposition propounded. But this is not the fact. Superficial observers have come to such a conclusion; prejudiced men have come to such a conclusion; many medical men broadly assert such a conclusion: but Nature asserts a conclusion quite confirmatory of the phrenological principle.

It is common for individuals to conclude that, because a man after an accident to the head, speaks rationally and answers when he is spoken to, and says "Yes," "No," and such similar phrases, that therefore all the powers of his mind are undisturbed and as perfect as they were before the injury. We often read in hospital reports of A. B. having fallen from a scaffold, and fractured his skull, was brought to the hospital quite insensible. He was trepanned, the portion of skull pressing upon the brain was removed, and he gradually recovered, and was dismissed from the hospital in the full possession of his intellect. Now, what is the basis upon which this judgment of the full possession of his intellect is founded? Because A. B. says Yes; No; knows his name; recognizes his acquaintance. If the man were looked after for years, it would soon be found that this full possession is a very imperfect possession indeed.

In order, however, to show how the facts, connected with injuries to the brain, demonstrate the truth of the third proposition, a case, peculiarly instructive, is now to be presented to the attention. A boy, aged nine years, was kicked by a horse in the forehead: he was taken up insensible, the skull was driven in in the situation of the organs of causality and wit on the right side of the head. He lost a considerable portion of brains, perhaps two table spoonsful. He was, by the skill of a medical practitioner in Kent, restored to health, went to school, and, though not bright, did his duties at school as well as most boys. He entered into business after serving an apprenticeship: and forthwith became liable to fits. The exercise of his reflective powers in arranging the business concerns awakened the affection of the brain produced by the injury, and thus the fits were induced. He found, moreover, that these attacks came on generally when his mind had most thinking to perform: and, also, if he could direct his mind into other channels just before the attack came on, he avoided the attack. The consequence arising has been that he has been obliged to give up business. Now, had any of the advocates of the opinion that persons may lose portions of brain without the powers of the mind being affected, seen him previously to his entering upon business, they might have brought forward this as a proof of the accuracy of their opinion.

There are two or three circumstances of interest in this case.

The first is, that the person was always very witty. He had that kind of wit called "dry wit."

Another circumstance was, that the injury was upon the organs of causality and wit, at the upper angle of the brow: and that whenever causality and the intellectual powers were much called into activity, the fits came on. In other words, when those parts of the brain were called into activity, the increased action not being allowed, as it were, a free exercise, the fits indicated the resistance.

Another circumstance of interest was, if he could turn his attention to any other subject he could keep off the attack: in other words, if he could call into activity other portions of the brain, these parts that, from being in an activity unsuited to a state of health produced by this activity, the attacks would be relieved.

Many cases have been established in medical writings and the Phrenological Journal, where particular portions of the brain have been found diseased after death, the functions of which portions had, during life, been manifested in a diseased state.

Having noticed these facts in connexion with insanity, dreaming, change of pursuit, and injuries to the brain: having shown that these facts are explicable upon the phrenological theory, it may now be beneficial to give some positive facts illustrating the truth of these propositions.

As it is found that these coincidences are constant between the development of these parts and the manifestation of the faculties therewith connected, have we not a right to conclude that these parts are associated with these faculties, in other words, that the proposition is true, *That different parts of the brain have different duties to perform.*

Having thus fully considered the proposition, and having shown the various sources from which credence can be derived, testifying to its truth, the third and fourth propositions, namely, *That the size of these parts, cœteris paribus, is an index of the power of the faculties,* and, *That the external form of the head is an index of the form of the brain,* will come next under consideration.

ESSAY III.

HAVING examined fully in the preceding Essays *two* of the principles upon which phrenology is based, namely, That the brain is the organ of the mind; and, That different parts of the brain have different duties connected with them, the third principle, *That the size of these parts, other things being equal* (cœteris paribus), *is an index of the power of the faculties with these parts connected*, may now be brought under consideration.

That size generally is an index of power most will allow. When we contrast the delicately moulded arm of a female with the massive, robust, muscularly marked arm of a smith, working on his anvil, acknowledgments felt and perhaps expressed, “How delicate,” “how strong,” almost instinctively arise in the mind. The reason is clear; size is considered as an index of power; of which truth numerous illustrations will at once occur to the mind.

It is true that *intensity* of action does not always accompany *power*. Many machines exhibit power of action that do not exhibit intensity: and many exhibit intensity of action that do not exhibit a relative amount of power. This, indeed, is often observed in reference to men’s minds, in connexion with their head. How often is it objected to phrenology that men with *small heads* are very talented, shrewd, clever, active, and enterprising. These characteristics of talent, shrewdness, cleverness, activity, are attributes or rather exhibitions of *intensity* of action rather than of *power*: and small heads as well as small machines, which cannot exhibit power, can exhibit intensity of action. Here is the mistake: the confounding power with intensity.

That size, in reference to the head, is an index of power will be rendered more clear, if it be remembered, that the head is divisible into three compartments; the organs of the animal feelings situated behind and marked dark in the phrenological sketch in Number I.; the organs of the moral and religious feelings situated above and marked light in the same sketch, and the organs of the intellectual powers situated in the front of the head. It is evident that a man may have a large head, but it may be large, not from the organs of the intellect or of the moral feelings, but from the organs of the animal feelings: and the opposite. *Absolute* size will not therefore be a sufficient guide: *relative* size must be taken into consideration.

But size is allowed to be an index of power by all. Let any look at the idiot, (plate I. fig. 1.) and contrast it with that of Benjamin Franklin, (fig. 2.) will not he come to the conclusion, that the one is an idiot and the other an intellectual being of the highest order. Whence this conclusion but from the circumstance that the concluder has perceived large size of the forehead and intel-

lectual power, deficient size of the forehead and idiocy to be coincident circumstances? So, in reference to the other divisions of the head, mankind generally have agreed that a particular shaped head "looks bad." Now this looking bad is, (there can be but little doubt) connected with the observation, which the observer in making never thought of noticing particularly, that wicked individuals and degraded characters have a particularly formed head: large in the back part and along the lower part of the sides of the head: and having this impressed upon the mind whenever he beholds a similarly shaped head, observes, "that's a bad-looking fellow."

And here it may be proper to notice a common observation, "I believe in physiognomy; I think that the *face* expresses a great deal of the character: but I cannot believe in the head expressing character." Such an objector forgets that the head and its size and its shape are most important constituents in the features; and that a most pleasing face, having put upon it an idiotic forehead, or a head very large behind and on the sides, will look quite different, and will lose most of its beauty: so much does the head affect the face. Indeed the head is the grand active power in producing the physiognomy; and this is now beginning to be most beneficially appreciated by artists.

Having thus removed some of the difficulties, which, in some minds, have acted as impediments to the perception of the full value of this third principle, that size is an index of power, some positive facts illustrative of the principle may now be brought forward.

The first individual is JOSEPH HUME. The head of this extraordinary man is very large. It is enormous in the organ of firmness and large in the organ of self-esteem. He has full combativeness. His perceptive powers are large, and his reflective faculties are such as quite to falsify the hacknied newspaper dogma, that he has not comprehensiveness of mind.* The parliamentary career of Joseph Hume is known to most. When he first went into Parliament he stood alone as the advocate of retrenchment and economy.† He rose in his seat hour after hour when the Estimates were being voted. The Members of the House coughed, hear-ed, hear-ed, talked, made peculiar sounds, and even snored in order to put him down. All was in vain. All information was as far as possible kept back from him. The public accounts were drawn up in so mysterious a manner, that it was almost impossible to unravel the

* It is true that the Member for Middlesex does sometimes make mistakes when reasoning upon general principles. But these mistakes occur generally from the great activity of the perceptive powers, which so load him with details that he cannot get freed so as to embrace clearly the general principle. This is often the case with men who have the perceptive faculties large.

† By asserting that he stood alone it is not intended to convey the idea that none besides Mr. Hume advocated retrenchment and economy. But what is meant is, that, while others called loudly for retrenchment, he showed by laborious investigations the excessive extravagance, the disgraceful trafficking, prevailing in almost all the public departments.

labyrinth of complications thus produced. Still Joseph Hume persevered. Neither coaxing nor insult nor opposition could arrest him in his career. And what has been the consequence. Let any one go to the House of Commons,* and on the Estimate nights, he will find a talented individual (with a head too small for his situation, although it has of late years become larger, and will, if the party be industrious, get much larger still), namely, Mr. Spring Rice; who, whenever he moves that His Majesty be empowered to grant, &c. &c., casts his eye at the Member for Middlesex, as much as to say, "Economic Hume do you oppose this: if not, it is all right:" and if Mr. Hume does not rise the Ayes are sure to carry the vote without difficulty. Go any other night and observe the fact, that whenever Mr. Hume rises to speak, he is attended to with respect. Now, how has this been brought about? Are we to suppose that there are not many Members, who would like to have encountered the storm and to have the honour of being victors after many years buffetting the waves? Are we to suppose that there are not many in the House of Commons, who have as earnestly as Mr. Hume wished for retrenchment and every good thing. Why then have they not come forward? Or if they have come forward, why have they not persevered? The answer is simple; they have not *size of head*. Joseph Hume has a large head, and he has persevered and has gained the victory.

There is another individual in the House of Commons, whose career is well known. He is the Atlas of Ireland—Mr. O'CONNELL. Look at his enormous head. Are not there hundreds who would delight in being called the Liberators of Ireland? Are not there many men who would have been delighted by the capability of begetting by the mighty throes of their intellect that stupendous moral giant that exhibited a moral force, which, even now, when we contemplate the majestic greatness of its achievements, makes us feel proud that we are men. Such was the Catholic Association?† Are not there many men who would be delighted to direct the minds of millions to the attainment of a specific object? Why then have they not done it? Because they could not. Why has Daniel O'Connell? Because he has a head, which, by its size, is capable of taking into its grasp all the circumstances essential to forming a gigantic plan; is capable of arranging all the means necessary to give that plan full effect: and has power to bear up under the disappointments, the opposition, the contumely, which, in the prosecution of this plan, he must necessarily meet with.

Men wonder at this extraordinary man. If they looked at his head and add to it the education that that head has received, they would not wonder. They would see the cause of his capabilities: and they would behold him as an instrument, which the Creator has raised for the purpose of effecting the deliverance of a nation

* Mr. Hume has now changed his place. He used always to sit beside a pillar on the left of the chair.

† For a most vivid, accurate, soul exciting account of the origin and progress and effects of this Association, read *Tait's Magazine, New Series*.

from oppressions of the most cruel kind, namely, oppressions *regarding the conscience*: oppressions, founded on a principle, (quite opposed to the will of the Creator, as recorded in the fact, that hardly any two heads are alike,) namely, that *one head has a right to legislate for the creeds of other heads*.

And here it may be advantageous again to notice the difference between *activity* and *power*, as connected with the career and the organization of another Member of Parliament. There is an individual, who has been long noted for his brilliancy of thought, his acuteness of expression, his fixation of opponents, his readiness at catching the weak point in an opposing argument, the skill manifested in his antitheses, but who has, compared to O'Connell, a small head. Need Mr. SHEIL's name be recorded? Here is activity of brain; but there is not power like O'Connell. O'Connell is like the discharge of a battery, that sweeps away a rank; Sheil is like the sharp-shooter that brings down some straggling or rash officer: O'Connell is like the burst of a volcano; Sheil is like the forked lightning that pierces through the clothing of sophistry, and inflicts political death. Behind O'Connell's most tremendous outbursts of cloudy indignation and withering sarcasm, there is a sunshine of humanity that gilds even the horror, like the sun setting in a horizon skirted by a stormy sky.

The Essayist has often been struck at the power of Mr. O'Connell in his replies to and attacks upon that fiery, honest but mis-educated lordling, Mr. Stanley. When Mr. Stanley was a Minister, cheered on by the Ministerial benches, he, like a sharp terrier, snarled and bit at the great mastiff. The great dog, although surrounded by a number of whelping curs in full howl against him, knowing also that the brave mastiffs without, who if they know of his courage would help him, would not hear of his encounter (O'Connell had denounced the *Times*), turned his tail upon the terrier, and looking sideways and backwards cast upon the snarler a scowl that kept him at bay; or, if he did venture to bite he was seized by the neck and shook so unmercifully, that it was necessary that another cur should get up to state that the terrier would not do so again.

The Essayist has further been pleased to find that Mr. Sheil has had the good sense to fight under the banners of Mr. O'Connell. Many have taunted him with this. But it is wise. The large head before the small head must ever be the rule: that is, if the large head has been educated as well as the small one.

It is interesting further to notice the fact that men that have led in revolutions have had large heads: look at the large head of Cromwell, of Bonaparte, of Washington. Many others might be named.

But there are other revolutionists besides those of the sword. There are silent revolutionists that use *mind* as their weapon. These men have large heads. Look at the splendid development of a JEREMY BENTHAM, of a FRANKLIN, of a GALL, and of a SPURZHEIM.

There was an instance of a large head that once it used to be

delightful to contemplate, as a splendid illustration of size connected with power. It was that of a man, whose grasp of mind enabled him to comprehend in the bounds of his intellectual vision the splendours and the vastnesses of the worlds in the wide regions of space, and, bringing these splendours and these vastnesses down to the earth, manufactured them by the cunning of his intellectual hands into a building of evidences,* establishing that the God of Nature and the God of Revelation is one and the same. And not only did he make the building but he ornamented it with the splendid clothing which his immense development of ideality enabled him to impart, rendering the building worthy of the truths which inhabited it. It was delightful to contemplate this mind, and it was that of Dr. Chalmers. But now the contrast is distressing. That very mind that once soared so nobly; that once poured forth bursts of eloquence, that perhaps were never surpassed, in behalf of Catholic emancipation, is now dwelling amongst the dens of bigotry, and is labouring hard to invest the dark places of horrid cruelty with the character of devotional beauty. That mind, that once felt the freedom of heaven, is now labouring hard to strengthen itself with the chains of hell, by attempting to impede the progress of that heavenly truth, "My kingdom is not of this world," by perpetuating a despotism over conscience.

Size is an index of power, that is where health exists. In many cases, such as in affections of the head, the head becomes very large: but this largeness is the result of disease: and no phrenologist ever thinks of judging from such cases. Many diseases affect the bones of the head, so as to make them enlarge. From such largeness there is nothing respecting power to be deduced.

Having thus illustrated the third principle upon which phrenology is based, the fourth principle, *That the form of the head corresponds to the form of the brain*, can now be beneficially examined.

It is quite evident that the perception of the truths of phrenology might take place without the knowledge that a brain exists. A person might know that certain developments of the head indicate certain dispositional tendencies or certain intellectual powers, without being aware that these developments are connected with a development of the parts of the brain situated beneath. Still, this would be only an empirical knowledge: though it would be knowledge. The phrenologist seeks a scientific knowledge: that is a knowledge which embraces the *cause why* certain parts of the head are developed in certain individuals. He therefore penetrates to the brain, and believes that to be the organ of the mind, and that different parts of the brain have certain duties connected with them; he inquires how it happens that the soft brain gives form to the hard skull.

To understand this it may be advantageous to give a short

* See Dr. Chalmers' Lectures on Astronomy.

account of the skull, of its structure and formation. The skull, as it is presented to us in adult age, exhibits a hard hollow bony covering, having a large cavity within. It seems to be one solid mass without division. On more minute examination, however, we find it to exhibit peculiar waved lines on its surface, which indicate the position of points where the bones of the skull (for the skull consists of bones) are joined together, these joinings being called sutures. The following bones form the skull, namely, the frontal, forming the forehead; the parietal, forming the crown of the head and part of the sides; the temporal, forming the lower parts of the sides of the head: the occipital, forming the back part of the head, and with the sphenoid and the ethmoid, forming the base. Now these bones in infancy and in youth, and in the earlier periods of manhood, are separate one from another. They unite by the joinings already named, called *sutures*: and thus one difficulty, standing in the way of the belief, that the brain can give form to the skull, is removed: because this difficulty consisted in the idea, that as the skull is composed of one bone, it is impossible that the skull could receive form from the brain.

The difficulty of conceiving that the hard body, the skull, receives form from the soft body, the brain, is diminished when the mode of formation of these separate bones is considered. Thus all these bones, in their first state, are nothing but *soft membranes*, approaching in its characters to *gristle*, technically called *cartilage*. This membrane is gradually converted into bone, by the deposit of bony matter from the extremities of small arteries, which branch through this membrane. Particle of bone is placed down after particle, and thus, in process of time, the whole of this membrane, which lies upon the brain, is converted into bone. It will be perceived from this statement that it is a gradual work: that the bone is not formed all at once: and that this gradual formation allows the soft brain to give form to the hard skull.

Another circumstance worthy of notice is that the brain is in *continual motion*. It continually pulsates: and by this continual pulsation it is enabled to act upon the body against which it pulsates. To understand the power of a pulsating soft body upon a fixed hard body, reference may be made to the power of a tender blade of corn forcing its way, in the spring of the year, through hard, even trodden-down soil: a blade, so tender, that even the most gentle force, applied sideways, would destroy it, and yet such is its power from beneath, that it forces its way through the superimposed earth. Again, it not unfrequently happens in the human body, that an enlargement of one of the great blood vessels takes place; and if this enlargement, called an *aneurism*, lies near a bone, it, by its continual pulsation, acts upon the bone, and in many cases, as it were, eats its way through the bone, so as to divide the bone into two parts. Now, here is a soft body acting upon a hard. Can it be difficult to conceive that the brain, (thus continually pulsating, and acting upon a variety of bones, these bones themselves gradually formed by the deposit of bony matter, and, in addition, continually absorbed, and continually renewed by

the deposit of fresh matter supplying the place of the old matter absorbed,) gives form to the skull, which has nothing except the brain to be deposited upon?

Much has been written respecting what are called *tables of the skull*; and that the inequality in thickness of these two tables prevents the brain giving form to the skull. Any one, however, who will take the trouble to examine these tables, as they are mis-called, will find that they lie one upon the other like two leaves of this book lie: and, consequently, any rounded or other form pressing upwards from beneath must, if pressing upwards the under leaf, press upwards the upper leaf lying in contact with the under leaf. Let any one put his finger under two of the leaves of this book, and see the result on both leaves. Transfer this to the brain and the two tables of the skull.

Another difficulty is the *frontal sinus*. This is a cavity, produced by the two tables just noticed, separating one from the other, and forming a cavity at the lower part of the forehead, immediately above the root of the nose. This cavity sometimes extends along the ridge forming the eyebrows about midway. Generally, however, the development of brain may be distinguished from the largeness produced by this sinus, by the rounded character of the former, and the ridged character of the latter.

The phrenologist being aware of the difficulties with which he has to contend, (and what science is without difficulties?) meets these difficulties with pleasure; and overcomes them.

Among these, one most commonly urged is, the difficulty of observing differences in the forms of heads. A like difficulty prevails in all branches of trade and manufacture. If you visit a wool-stapler, and present to him a variety of wools, which to an inexperienced eye are so similar, that no difference is discoverable between them, the wool-stapler will not only discover the differences, but will tell the country which the sheep inhabited from whose back the wool was removed: and so exact is he in his knowledge, that he buys in accordance therewith, and realizes, benefit. So, in other trades: a tact is gained by practice, or what is called experience (practice long continued), which, without practice cannot be gained: and the inexperienced in wool would be as little justified in despising the assertion of a wool-stapler that he can judge of the differences of wool, as is the inexperienced in phrenological observations in denying the possibility of distinguishing differences in human heads.

Having thus endeavoured to establish *That the brain is the organ of the mind; That the different parts of the brain have different duties connected with them; That the size of these parts, cæteris paribus, is an index of the power of the faculties therewith connected; and, That the external form of the head is an index of the form of the brain*, this Essay may be appropriately concluded.

ESSAY IV.

INTELLECTUAL FACULTIES. *Perceptive Powers. Language :
The History of the Discovery. Individuality. Form.
Size. Weight. Colour.*

HAVING in the preceding Essays endeavoured to establish the general principles upon which phrenology rests, in this Essay an attempt will be made to illustrate these principles by particulars : these having reference to the organs of the INTELLECTUAL faculties.

These organs constitute, when grouped, the whole of the train situated immediately behind, and constituting the forehead. When large, they make the forehead to be large. It is found, by observation, that the foreheads of men differ much in form. Some have a great fulness at and along the brow : others have the forehead very full along the central part, giving a degree of tenseness ; and some have the forehead most large along the upper part. Individuals, endowed with these differently shaped foreheads, will be found to differ in their intellectual powers. Those with large developments along the brow, will be seen to be quick, shrewd, and generally rapid in the utterance of matters of detail. Those with the central part largely developed will pursue mathematics and other exact sciences with delight. And those with the upper part largely developed will be found to be fond of reflective exercises, of inquiring into the causes of things ; and if they have the lower part of the forehead small, they will be liable to fall into the mistake of building ships, as Lord Bacon so pithily remarks, with materials not sufficient to make a boat.

In accordance with these, easily verified, facts, phrenologists have discovered that there are distinct classes of intellectual faculties. The *perceptive*, represented in the wood cut, forming the lower part of the forehead called the brows ; the *relative*, forming the central part of the forehead ; and the *reflective*, forming the uppermost tier.

Of the PERCEPTIVE powers, the first organ to be noticed is that of LANGUAGE*.

As the discovery of this organ was the foundation of phrenology, and, as, in addition, the history of its discovery may serve the purpose of illustrating the mode of observation adopted by Gall in his investigations, it seems proper to give a full account of the circumstances connected with its discovery. Gall, when quite a boy, was often reprimanded by his tutor for not being able to compete with another boy, who was educated with him, in *learning by rote*. Leaving this tutor, Gall went with the same schoolfellow to a school containing 30 boys, at Bade. Some of these boys who were at the eighth or tenth place in many exercises, rose to the highest

* Marked O.

place in lessons committed to memory. Two of these excelled Gall's companion; and in all three the coincident circumstance manifested itself of the eyes being so prominent as to occasion the boys to be nicknamed "yeux de bœuf," or "bull's eyes." Gall afterwards went to a school at Bruschal, and observed that those, who excelled him in the power of committing to memory, had the projecting eye. At the college of Strasburg, whither Gall next went, he was struck by the observation of a similar coincidence; and was at length led to the conclusion that the particular power exhibited by these individuals might be connected with this peculiar shape of head.

Having entered at this time upon the study of those sciences connected with medicine, he was led to enquire, *are not these developments connected with the development of the different parts of the brain*, and not simply of the skull itself? Having been led to a fixed conclusion that this was the case in reference to the development of the eye, the brain situated behind being developed in the case where the peculiarity referred to exists, he was led at once into a train of investigation which has produced the most notable results.

In addition to these facts, of which now numberless cases, illustrative, might be adduced, facts, of late years, have been accumulated to prove by *diseased* manifestations and by *diseased* changes, exhibited on examination after death, that such a part of the brain is connected with the power in question.

Such then was the mode of investigation adopted by Dr. Gall, and recognized by all phrenologists; a mode which, it is imagined, all will regard as simple, and as accordant with that system so much and so deservedly lauded in the present day, namely, the system of *induction*.

The existence of a large organ of language is indicated by the prominence of the eyes, also by a downward depression so that the under eyelid appears swollen. Mr. Combe* remarks "if the fibres, that is, of this organ be long, they push the eyes as far forward as the eyebrows, if they are only thick, they push them towards the outer angle of the orbit, and downwards."

In regard to the *functions* connected with the organ of Language it has been found that those who are endowed with this organ largely developed, have great power in learning words. They make good linguists so far as the learning of the words of a language are concerned. But it is quite evident, that, as words are mere arbitrary signs, signs agreed upon by society to represent certain things or ideas, and from this agreement deriving all their force, persons may learn an immense number of words without acquiring any real knowledge; that is when they do not understand the things

*In regard to Mr. Combe, the following quotation from Dr. Epps's *Horæ Phrenologicæ* will testify to the opinion entertained by the Essayist respecting Mr. C. "Indeed, no man seems to have arisen in this country, with the exception of Combe, who can be said at all to represent the departed genius either of Gall or Spurzheim.

or ideas, of what the words are the signs. They may pour forth words in torrents, and yet be nothing better than word utterers not sense declarers. And this, it is worthy of observation, is too frequently the case.

On the contrary, when the organ is small, the individual thus deficiently endowed has great natural difficulty in finding expression for his sentiments; a difficulty, the means of overcoming which, will be hereafter pointed out.

Having thus noticed the fact that there is a faculty for learning arbitrary signs or language, it seems natural to infer from the existence of languages, that is, *of masses of signs*, that there must have been objects of which these words are the signs. These therefore must be powers for the recognition of objects, or existences, individual bodies. The existence and the early activity of some power of this kind are exhibited by children, as soon as, yea, even before, they talk. “*What’s THIS?*” is the inquiry, the constant inquiry, of the innocent little prattler. Now, what is the *this*? It is an individual existence, that the child is struck with; and, in the desire to communicate the impressions, produced by the object, seeks to ascertain the name or the sign by which it is known by those by whom he is surrounded. Grown up persons are inquirers, when any thing new is presented, “*What is it?*” Now this “it” is some existence, some thing, of which they knew not the sign. But the thing existed before the inquiry could be made; and hence the truth becomes evident that words do not produce ideās: indeed that intellectual ideas are the effects of certain existences acting upon powers implanted by the Creator: and that words are the signs of these ideas called into existence by the objects acting upon the faculties given.

To exhibit still more strikingly the existence of a power, that appreciates individual existences, one fact may be recorded, that there are many individuals, who, from palsy, or other injuries to the brain, are unable to remember the *names* of things, and yet remember the things themselves. This could not be, unless there existed a power in the human mind which has the capability of recognizing the thing, the existence, independent of its name.

It has been long observed that this power of remembering individual existences is possessed in very different degrees by different individuals. Some men are extremely quick in obtaining information upon things: are quick in learning the details of the arts and of the sciences; and in society are regarded as brilliant. They have a superficial knowledge of almost all things, which, viewed philosophically, are appropriately designated by individual existences. Such individuals, Dr. Gall observed, have the middle or lower part of the forehead, situated immediately above the roof of the nose, largely developed; a form dependent upon the development of the anterior inferior part of the brain. This organ is called the organ of INDIVIDUALITY*, because taking note of individual existences.

* Marked No. 1.

This faculty corresponds to the noun in grammar: which, although usually defined as the name of a person, place, or thing, is defined phrenologically as the object of the organ noticed, which comprises in its embrace all individual existences: the name being a mere adjunct, the individual existing without a name, as well as with: a fact, having this practical bearing, namely, establishing the necessity of teaching children the individual existence, instead of pointing out merely the names of these existences.

Another fact, which must have impressed even the least diligent observer of intellectual character, is, that if several persons are asked to describe the same thing, each will notice different features in that individual existence: one will be struck with its colour; another with its form; a third with its size, and others with other properties or qualities belonging to the individual existence. Why should this happen? The common explanation is, each one was struck most by the property which he noticed. This does not satisfy the philosophical inquirer. He wants to know why one observer is affected most by this property, and another by that. He wishes to ascertain the peculiar constitution of mind, causing this difference in making observations regarding the same things. Phrenology gives the explanation, for phrenologists have discovered that all men have certain organs, connected with the faculties that perceive properties, and that as any one of these organs is developed in a greater degree so will be the tendency to have that organ called into a greater degree of activity: and the result of that activity will be the noticing those properties connected with the functions of the organs thus largely developed.

These organs are now therefore to be noticed. They take notice in their functions of the *properties* of bodies, corresponding to the ADJECTIVES in Grammar; and they are situated along the brow, on each side of the organ of Individuality. Thus, the organ connected with the noun is placed in the centre, immediately above the root of the nose, and the organs of the perceptive powers, corresponding to the adjectives, by it on each side, thus supporting the noun, as the adjectives are linked in nature to the individual of whose properties they are signs.

*The first adjective organ is that of FORM.**

This organ is situated below and transversely at the side of individuality, the organ itself being placed behind the internal angle of the orbit, the convolution of brain constituting the organ lying on each side of the elevated part, seen on looking into a skull at the front, called the *crista galli*. It gives, when large, a great width between the eyes, and when much developed, pushes the eyeball toward the external angle of the socket outward and downward.

Dr. Gall was the first who was struck with the configuration noticed. He considered the function connected to be the *remem-*

* Marked No. 2.

bering of persons. But this, as Dr. Spurzheim has satisfactorily shown, is only in part *dependent upon this organ.* Dr. S. has established that this gives the power of *remembering forms.* Faces are forms, which individuals, in regard to the most noble part of the human body, present to observation, and some individuals have great power in remembering faces. In such, this organ is large. Dr. Spurzheim observes, that, according to the external configuration of the head of the Chinese, this part of the brain is much developed in them.

This organ, when large, must be of essential service to the mineralogist, the portrait-painter, the statuary, the geometrician, the milliner, the tailor, and all those who are engaged in pursuits which require an accurate knowledge of form.

In the bust of King George the Third this organ is large.

The existence and the situation of this organ are considered as fully established.

*The second adjective organ is that of SIZE.**

This organ is situated *above* and *outside* the organ last described. It lies immediately outwards of the organ of individuality, at the inner and upper angle of the brow.

Dr. Spurzheim predicated the existence of this as a separate organ, distinct from the organ of form. He also intimated that it must be situated close to that organ. Later observations both by him and by others have established to a certain extent the existence of this organ.

Those individuals who have this organ large have great power in remembering the *size* of things. It is large in Brunel, in Toms the celebrated sculptor of Tam O'Shanter, who states that he never needs to measure in order to judge of size, or of proportion.

The distinction between a knowledge of form and of size is rendered evident by the fact that many persons have an accurate remembrance of the forms of things, though not of the sizes, and in them the organization is said to be correspondent, namely, a large organ of the one and a small organ of the other. It is evidenced also by another fact, that a body, which may be *round*, thus having relation to the organ of form, may be *large* or may be *small* appealing to another organ, namely, the organ of size. And, it is interesting to observe, that Dr. Spurzheim in predicating the existence of this organ was influenced by the metaphysically derived fact, that the idea of size and the idea of form are essentially different; and, in further predicating its locality, as being near to the organ of form, was influenced by another metaphysically derived fact, namely, the close connexion subsisting between form and size.

The frontal sinus existing often in the situation of this organ throws such barriers in the way of the observation of this organ that its existence is stated as *probable.*

* Marked No. 3.

The third adjective organ is that of WEIGHT or FORCE.*

This organ is situated immediately outward of the organ of size, between the organ of size and a line passing through the centre of the brow.

Dr. Spurzheim predicated the existence of this organ.

It has been observed, that many men have great power in estimating the necessary degree of force essential to produce a given effect. Thus the bowler at a game of crickett has for his object the knocking down of the wicket. To effect this he must give a sufficient impetus to the ball so as to enable it to reach the wicket, and reach it in the direction so as to prevent the bat from meeting it. Some men excel in this. They do not know why, for they excel without much practice: whilst others with the greatest practice, do not succeed. The same is observed in quoits; the same in archery: the same in foundries where welding iron goes on. These men are found to have this part of the brow large and overhanging. Sir George Mackenzie and Mr. Simpson,† of Edinburgh, have paid great attention to this organ, not only in reference to its development, but also in reference to its functions. All celebrated engineers are endowed with this organ, Brunel has it large. - Galloway has it large. Telford also. Sir Isaac Newton has it large.

The primitive power connected with this organ has not as yet been sufficiently eliminated from the facts accumulated. The circumstance that blind puppies will, if put on a table, not creep beyond the margin of the table, so as to fall, may throw some light upon this subject.

Some of the Manchester phrenologists, Mr. Edmondson, Mr. J. N. Rawson, Mr. George Wilson and others, consider that this organ communicates the power of perceiving a deviation from a perpendicular line.

It seems to enable man and animals to adapt their movements to the law of gravitation.

The last adjective organ is that of COLOUR.‡

This organ is situated at the middle of the brow, outside of the organ of weight. When fully developed, it gives a vaulted or arched character to the eye-brow. When imperfectly developed, as it is in Mr. Mylne's head, an indentation appears in this part of the brow.

It has been long observed that persons differ much in the power of perceiving, and also in the power of distinguishing, colours. Some can perceive only black and white. Dr. Spurzheim knew a family that were so affected. Some can perceive colours but cannot distinguish them: that is, the perception is so weak that the memory awakened by coloured objects is not sufficiently vivid as to enable the individual to perceive the differences between them

* Marked No. 4.

† See an interesting paper in a late number of the Phrenological Journal by Mr. Simpson.

‡ Marked No. 5.

so as to designate the colours by the proper names. Other persons, females in particular, have great power in perceiving and distinguishing colours. In them this part of the head is much developed: also in those painters, who have been famed as *colourists*. Mr. Mylne's history is strikingly illustrative of the want of this power of perceiving colours. This gentleman, who is now perhaps the first mechanical engineer in Scotland, was placed by his father in a trade, in which he was obliged to distinguish colours. He could not: and necessarily made the most egregious blunders, bringing one colour for another. His master believing this to be the effect either of inattention or of obstinacy, reproved him, and poor Milne's life was made miserable. It is reported that he ran away from his master. At length, however, he was allowed to pursue his natural bent, which always was to mechanics, and the result is now perceived in the elevation to which he has attained.

It was once thought that the perception of colour is dependent upon the eye. But this is now known not to be the case. Individuals with the best eyes have not an accurate perception of colours. And persons with the weakest eyes have the most accurate perception. The Essayist has a friend in Edinburgh, who has such weak eyes that he cannot see to read by candle-light, and yet he has the most accurate perception of colour.

Indeed, Gall and Spurzheim, in their progress of making observations on this organ, met with a bookseller at Augsburg, born blind, who maintained that it was not the eye but the intellect which recognizes colours, and asserted his ability to form a notion of the primitive colours.

Indeed there can be no doubt that the power of perceiving colours depends upon the development of this part of the brain.

Such are the perceptive powers. Such are the *head* adjectives.

This Essay may be concluded by a few practical remarks.

Practical Remark, 1.—It is quite evident from the remarks made on the organ of language that it is not right to punish boys who are not so quick as other boys in learning words. It is also not wise to encourage boys too much, who have a strong development of the organ of language, in learning words, as thus they will learn words without understanding their meaning: and thus will become *rapid talkers*, but not *rapid thinkers*.

These remarks teach, also, that when there is a deficiency in the organ of language, we should supply the deficiency by calling as many organs into activity as possible to aid the organ of language. This will lead us to seek to combine the teaching of words with the *things* of which the words are signs. Thus, suppose a child is taught to spell the word monkey, shew him a monkey: that is, viewed phrenologically, besides exercising his organ of language, exercise his individuality, his form, his size, his colour. Thus, four organs are brought to aid the organ of language. All *mnemonics* or means of improving the memory, are founded upon such aid: and the inefficiency of these systems, in many cases, arises from the professor making use, in all persons, of one organ to aid the memory.

Thus one teacher founds his system on the use of numbers: but a person, who has a small organ of number, (an organ hereafter to be noticed,) will rather be impeded than aided by such assistance.

Another method to aid the memory of words is to write the words down and to find out their derivation. This exercises every faculty, and hence the assistance derived.

Practical Remark, 2.—One fact, showing the evils which result from the too constant exercise of the organ of Language in educating it almost solely, is that, when palsy seizes an individual, the memory of words is the power generally lost; a circumstance, which the Essayist believes, is in a great measure, dependent upon the excessive exercise of this ill-fated organ in education. This organ is overworked. Weakness occurs, and, on the operation of any powerful agent, disease takes place; and the power of the organ is destroyed.

Practical Remark, 3.—As the organ of Form remembers forms, and as excellence of taste is dependant upon the nature of the form remembered, how essential is it that children should have none but the best forms placed before their view. The ugly images of former days are now banished, and the cheapness of works of plaster bids fair to elevate the taste of the rising generation.

It has often been a matter of astonishment with many how the Greeks attained the high excellence in taste which they manifested and which has rendered their works in the arts so very valuable. Their children saw the best forms, and seeing these best forms, an accurate taste would be induced, and at length the constant gratification of this taste would develop the organ; and it is curious that the form of nose, called, it is worthy of remark, the Græcian, has as one of its constituents a full organ of form.

Practical Remark, 4.—The Essayist knew a founder, who, endowed with all the perceptive powers so large as to make his brow almost a deformity, was perpetually complaining of his men, because, when working in iron, they used too much, or too little force. Had he known phrenology he would not have expected of men, who had not so full an organization of the organs as he had, the same tact. He must select men with similarly constituted foreheads.

Practical Remark, 5.—From the remarks on the organ of Colour, the absurdity of putting children to businesses when they have not the requisite faculties is quite apparent. The Essayist knew a tailor, who from a deficient organ of colour, frequently put the cloth that was to be inside the collar outside. His wife was obliged perpetually to direct him for fear of his making such and similar mistakes.

Practical Remark, 6.—The organ of colour existing shows that colours are given to afford pleasure; and that therefore any attempt to establish an uniformity of colour in reference to dress must be unnatural.

In the next Essay the Relative Faculties and their organs will be brought under consideration.

ESSAY V.

IN the last Essay, that division of the intellectual faculties, known under the name of perceptive, was considered. In the present Essay, the second division, consisting of the *relative powers*, will be examined.

These faculties are called relative, because, the *existence* and the *properties* of the existence, having been ascertained by the perceptive powers, the next step is to ascertain the *relation* in which these individual existences and their properties are placed in reference to other individual existences.

Thus, every individual existence has a *state* in which it exists or manifests itself. The individual existence can be viewed simply as an existence, which is known, as was noticed, by the term *noun* : or it may be viewed in a state of *action* or *rest*, or being *acted upon*, which is expressed by the part of speech, called the *verb*.

It is quite evident, when an individual existence is viewed in relation to any action or state of being, in which it is, that, then there must be, in the recognition of the state of action or state of being, a power of mind, different from that which recognizes the individual existence simply. This state of things, having relation to the condition of the existence, is called an *event*. Thus, the word "horse" is the name of an animal, an individual existence, having a particular form : but, if the horse puts one leg before the other *slowly*, such state, relative to the action of the horse, is defined by the phrase "walks :" and whilst the expression "horse" does not indicate an event, the phrase "the horse walks" does indicate an event. It is further found that some individuals have a most powerful memory of events, and, in them, it was observed, that a particular part of the forehead* was largely developed.

The part of the brain situated behind this part, and constituting, when developed, the fulness of the forehead in this particular direction, is called the organ of EVENTUALITY. This organ, it will be seen, is situated in the centre of the forehead ; so that, if a straight line be drawn from the root of the nose, perpendicularly upwards, individuality will be the first, and eventuality the second in order.

In the busts of Pitt this organ is represented large, and his intellectual power depended principally upon the activity of this faculty. He was a man who had *no breadth of mind*. He had great readiness, and this, by many, was mistaken for depth. It is related of

* Marked No. 6.

him, that, when he introduced the tax upon watches, he sent for two or three of the most clever watch-makers, and required them to describe the parts of a watch, and the art of watch-making. He went to the House, and gave a most succinct, accurate, and interesting history of watch-making, and of the individual parts of the machine itself, and astonished the House by the wonderful extent of his knowledge. But this was not depth of mind; it was the result of his eventuality. It is curious, therefore, to observe that the power which he manifested most, was that, which, in his busts, made without any reference to phrenology, is exhibited most strongly developed.

This organ is large in those who can give a narrative of events: and the organ is found very large in the busts of Sir Walter Scott, whose power at narration no one doubts.

*The next relative organ is that of LOCALITY.**

This organ is situated on each side of the organ of individuality; it lies rather obliquely outwards.

The discovery of this organ was made by Dr. Gall.

Gall found that he could not readily find places where he had been, or where he wished to go. A schoolfellow had the greatest power in this respect. Gall moulded the head of this friend, Scheidler, and he distinguished "at the eyebrows, toward the middle line of the forehead, a protuberance on each side, which reached to the middle of the forehead." By this Gall's attention was arrested, and, after collecting a vast variety of corresponding development and manifestation, more particularly as exhibited in the desire to see places, to travel, he became convinced of the existence of this organ.

It is interesting to observe, that this part is represented large in the pictures and the busts of great astronomers, navigators, and geographers. Newton, Columbus, exhibit this organ large. In Captain Cook, his biographer states, that the frontal sinuses were extremely prominent, which appearance was, no doubt, dependent upon this organ being largely developed.

This seems to be essential to the landscape painter. It gives the power of remembering places.

Dr. Spurzheim considered it to be the organ of *space*.

The relation it bears to the action or state of being of the individual existence, is that in which the adverb of place stands to the verb. Thus, every action or state of being of any individual existence must take place in space; and the particular point in space where such action or state of being takes place answers to the adverb *where*?

But every action or state of being takes place not only in space, but also in *time*, and to express this modification of the action or state of being, of which the verb is the sign, there are adverbs of

* Marked No. 7.

time, in the same manner as there are adverbs of *place*, to express the modification of the action or the state in reference to space.

The Creator, it may be inferred, would therefore endow the human being with power to observe this modification ; and, as it is found, that power is associated with organization, the inference seems justified that an organ of time would be one of the gifts of the creative wisdom.

Such is the case, and

*The next relative organ is that of TIME.**

This organ is situated outside of the organ of eventuality, and just above that of locality. In fact, locality seems in part to separate this from the organ of eventuality.

Some persons have a very accurate knowledge of time and “ of intervals in general.” Many persons can tell what hour it is, and seldom make mistakes. Some individuals sing in time and dance in time. Others cannot do either: and, while, in the former, the particular part, called the organ of time, is largely developed, in the latter, there is often an indentation in this particular part.

Many men have poetic minds, but cannot express their thoughts in verse. They have this organ imperfectly developed.

This organ, in its activity, seems to respond to the adverb *when*?

The next relative organ is that of TUNE.†

Passing outwards from the organ of time, the organ situated next is that of tune. A great development of this organ makes the central lateral parts of the forehead to be enlarged. If a line be drawn from the outer angle of the eye perpendicular to the middle of the forehead it will rest on this organ.

In Handel, Haydon, Mozart, Viotti, this organ is large.

The other relative organs seem to be more intimately connected with the eyes ; this more intimately connected with the ears. Individuals, who have this organ large, have an accurate memory and perception of tones ; and thus a power is gained of perceiving the harmonies of sounds.

Singing birds may be distinguished from birds that do not sing by the fulness in this part of the head.

This organ is considered to be established : though it is often difficult to observe it.‡

The next relative organ is that of ORDER.§

This organ is situated immediately below tune, being the organ

* Marked No. 8.

† Marked No. 9.

‡ Mr. Hawkins stated he had experienced considerable difficulty in ascertaining the locality of the organ of tune until, on one occasion, he attended an Oratorio at one of the Theatres : on looking round upon the various individuals present, who had been brought together principally by the music, he at once saw such numerous illustrations of the organ of tune, that he ever afterwards was able without any difficulty to recognize the situation of this organ.

§ Marked No. 10.

constituting the part immediately above the outer angle of the orbit of the eye, outside of the organ of colour.

When large, it gives a rectangular form to the outer angle of the orbit.

Persons endowed with this have a great delight in order : and, if not possessing good sense, embitter the lives of those by whom they are surrounded by a perpetual activity of it, exercised towards individuals, who may not have the same organization.

They are what are called particular people. Their perpetual observation is—"A place for every thing, and every thing in its place."

*The last relative organ is that of NUMBER.**

The situation of this organ is readily recognized. On feeling the forehead at the external angle of the orbit a ridge will be found extending upwards. On the outside of this ridge is the organ situated; when large, the arch of the eyebrow is either much bent downward, or there is an elevation at the external angle of the orbit.

As a relative faculty, it is quite evident, that, as individual existences may be many, this will take note of the relation in reference to the number.

This organ is therefore, it may be presumed, large in celebrated calculators. It is so in George Bidder, in Humboldt. And it is confirmatory of the existence and of the situation of this organ, that in the portraits or the busts of Euler, Kepler, Napier, Gassender, La Place, Pitt, this organ is represented as largely developed.

This organ is essential to the pursuit of arithmetical calculations; and of algebraical and logarithmal calculations so far as these are connected with number.

This organ and its functions relate to the adverb of number.

PRACTICAL REMARKS.

Practical Remark, 1.—It is evident from the history of the various relative faculties, that, in selecting occupations for the rising generation, it is of the highest importance that the faculties required to be exercised in different occupations should be known : to effect this it is necessary that the principles of trade should be ascertained, and then, these being ascertained, the phrenologist will be able to decide whether the individual has those faculties, so developed, as to enable him to pursue a particular occupation with benefit to himself and to the community.

Practical Remark, 2.—By the circumstance, that some individuals have a large, and others a small, organ of number, and so in reference to other organs, we have explained the fact, that children may be clever in one department of learning and not clever in another department : and we are taught the absurdity, both of punishing the boy who does not excel in arithmetic, and of praising the

* Marked No. 11.

boy who does; that is, when the difference depends upon the difference connected with development of power, and not upon the difference in degree of industry. And so, with the merit and the demerit of success or want of success in other branches of learning.

Practical Remark, 3.—The evil of making the power of *playing music* with excellence an accomplishment to be possessed by all young ladies, is rendered apparent. Since, it is quite evident, that a person, with a deficient development of the organs of time and tune, can never become a superior musician, although she sits on a music stool six hours a day, and is rewarded by *curvature of the spine*, and by other maladies, even worse, resulting from the constrained sitting posture.

ESSAY VI.

IN the last Essay, the second division of the intellectual faculties, entitled the *relative*, was considered. In this, the remaining division, the REFLECTIVE faculties will be examined.

These faculties are called *reflective*, because their offices seem to be to draw out certain *conclusions* from the facts, and the relationships of facts, accumulated by the perceptive and the relative intellectual faculties. Having ascertained the existence of bodies by the perceptive powers, and the relationships in which those bodies, thus existing, bear to one another by the relative powers, the mind naturally seeks to ascertain the bases upon which these relationships rest, in other words, the *causes*. The faculties, which constitute this natural tendency of the mind, (and who will deny that this is a natural tendency of the mind) are those which are now to be noticed.

These reflective faculties form the uppermost tier in the forehead. The perceptive, forming the lowermost tier: the relative, the middle tier: and the reflective, the third tier.

One of the first operations of the mind, after perceiving the facts and their relationships, is to notice the similarity between certain facts and phenomena. Children exhibit this disposition very early in life. They seem to be delighted in observing the similitudes of things. They illustrate their views by comparisons. And, in after life, the exhibition of this tendency is as constant. It might therefore have been inferred that some organ, connected with this particular power, exists in the human brain.

Dr. Gall was led to the discovery of this particular organ by the following circumstance. In reasoning on philosophical subjects with a man of great talent, he observed, that, when this person was at a loss to explain himself, he had recourse invariably to a comparison. This characteristic feature led Dr. Gall to examine the philosopher's head. He observed a great prominence in the central part of the uppermost tier of the forehead. This struck Dr. Gall, and he was induced to examine other individuals. In two ex-jesuits, celebrated preachers, and noted for the use of brilliant comparisons and analogies, the same protuberance was evident. This led to further observations, and Dr. Gall, in a short time, became fully convinced of the existence and of the situation of this organ, which he called the *organ of analogy*.

*This organ is now called the organ of COMPARISON.**

It is an organ which is the most frequently developed among the reflective faculties: and hence appeals to it are so very suc-

* Marked No. 12.

cessful. The most captivating speakers are those who use comparisons. And it is a most striking testimony of the truth, "That Christ needed not that any one should tell him what was in man, because he knew already," that, in His instructions, he perpetually appealed to this faculty. "He spake unto them in *parables*;" in other words, he made appeals to that one of the reflective organs, which he knew was most largely developed in the human head.

Mr. Combe gives very accurate distinctions by which the functions of this particular faculty can be known. "Tune," he observes, "may compare different notes: colour contrasts different shades: but comparison may compare a shade and note, a form and a colour, which the other faculties by themselves could not accomplish."

This organ is very large in Thomas Moore, the celebrated poet of Ireland. It is large in Pitt's bust. In Dr. Chalmers and in Burke it is very large: and any person acquainted with the writings of these men must be convinced how strikingly the manifestation and the organization are accordant. It is large in the cast of the skull of Rowland Detrosier. It is large in the mask of Benjamin Franklin, and, every one, who has read poor Richard, must have perceived the prevalence of the condition of mind connected with the existence and the activity of this faculty.

But the mind, it is well known, does not feel satisfied with the mere production and the discovery of comparisons, there is a strong desire to know the *causes* why certain things appear to have a similarity, and others, a dissimilarity. This strong desire could not have produced itself. The Creator must have imparted some power or powers, otherwise this desire could not have originated.

Dr. Gall had long observed that men, noted for strong, philosophical reasoning powers, had the upper part of the forehead very prominent. He found that these who took delight in penetrating into the depths of essences, and other matters, generally considered to pertain to the study of metaphysics, had the same development.

Further observations have led phrenologists to the conclusion that the part of the brain, situated on each side of the organ of comparison, has attached to it a function which induces individuals possessing it large, to inquire into the causes of things, and hence this part is called

*The organ of CAUSALITY.**

This organ is large in Kant, in Franklin.

Dr. Spurzheim thus briefly portrays the part that this faculty performs in a philosophical understanding. "The faculty of individuality makes us acquainted with objects and facts: the faculty of comparison points out their identity, analogy, or difference; and this faculty desires to know the causes of all events. Consequently these three faculties together form systems, draw conclusions, induc-

* Marked No. 13.

tions, or corollaries, point out principles and laws, and constitute the true philosophical understanding." Indeed, it may be added that the perceptive and the relative powers are useful in collecting materials; they are the quarrymen, who go into the quarry of nature and of revelation, and dig thence the precious stones: they are the beings who collect the pebbles on the shores of the great ocean of truth; but the reflective powers are they, who, contemplating and taking possession of the materials, thus quarried, deduce general truths and doctrines, and enable man to ascend to the contemplation of the laws, which regulate the phenomena of the universe.

It is quite evident to the common observer that some persons are more *witty* than others. Some are almost always laughing: they are pleased with observations which do not excite the risibility of other men, and some have a very quick perception of any thing ludicrous. They often are not endowed with powerful causality but are simply witty.

Individuals, who are witty, are found to have the part, situated outside of the organ of causality in the same tier, largely developed. This part has therefore been known as

*The organ of Wit.**

Most phrenologists place this organ in the group of those belonging to the sentiments; because its functions seem to bring it more under the character of a *sentiment* than of an *intellectual power*.

This organ is large in Sterne, Voltaire, Henri Quatre.

Persons having it large are fond of jests, irony, and, when destructiveness and secretiveness are large, of sarcasm and mockery. They often laugh at other persons' expense: would destroy a friend rather than lose a good joke.

It may be advantageous to notice why it is considered here along with the intellectual powers.

It seems to the Essayist, that Mr. Hawkins opinion, that the organ of wit in its function corresponds to the *interjection*, is correct. This organ appears to be called into activity when conclusions are to be formed. After the facts have been collected by the perceptive and the relative powers: after the analogies and the connections of these facts have been ascertained by the organs of comparison and causality, then the mind passes to the condition of a conclusion, and the interjection, "Ah! yes! true!" escape as utterances of the agreeable condition connected with the arrival at the conclusion.

Laughter is nothing more than a *series of interjections* strung together, thus, ah—ah—ah—ah—ah—ah—ah—ah—ah—ah—ah, distinct interjections, will, if united together by rapid utterance, be a laugh.

In the manifestations of wit the following circumstances are observable. That when we are affected by any thing ludicrous, there

is either a perception of *incongruity where congruity* was expected, or a perception of *congruity where incongruity* was expected. The mind, on perceiving the unexpected nature of the conclusion, to which it is thus led, is affected ludicrously, and this capability of being affected seems to be dependent upon the existence of the organ of wit.

Thus in taking a newspaper and reading it across the most ludicrous effects are produced. Thus—

“The sword of state was carried”

“Before Sir John Fielding and committed to Newgate:”

Again. “One of his Majesty’s principal Secretaries of State”

“Fell off the shafts, being asleep, and the wheels went over him.”

Again. “He was examined before the sitting magistrates”

“And no question asked.”

When any one reads these he is induced to laugh, and why? Because he expects that there will be congruity between the parts of the sentence, and finding so great an incongruity he is astonished, and, thus his organ of wit becoming affected, he utters the interjections of laughter.

It would thus appear that the organ of wit forms as it were the connecting link between the *intellectual* powers and the *sentiments*. It seems to partake of an intellectual power so far as the perception of conclusions is concerned: and it partakes of the character of a sentiment in having a feeling of gratification connected with the perception.

On these grounds it is placed in this Essay where it is.

PRACTICAL REMARKS.

Practical Remark, 1.—The most instructive lesson to be drawn from the facts connected with the history and the situation of the faculties is, that as the Creator has arranged them in a certain order, it is quite evident that these faculties must be educated according to the order in which they are arranged. Thus there are the organs of the senses, the eyes, the nose, the tongue, and the ear, situated *in the face*. These receive the impressions of external objects. Then come the organs of the intellectual faculties, situate above in the *forehead*. Of these there are three divisions, or tiers: the *perceptive* powers occupying the inferior tier; the *relative*, the middle tier; and the *reflective*, the uppermost or third tier. It is quite evident thence, that, in education, the order must be that here pointed out. The mind of the child must be stored with *existences* and the *properties* of existences, (taken notice of by the perceptive powers); the relations, which existences bear to each other, (taken notice of by the relative powers); and *then*, the reflective powers may be beneficially called into activity, having materials on which they can exercise themselves.

Hence the absurdity must be apparent of teaching children *abstract truths*, either in science, morals, or religion. Children should be taught *facts* regarding the Deity, whether as the God of nature or as the God of revelation. Store the infantile mind with these, and

pray allow that mind to draw its own conclusions, when it is capable of doing so.

Hence the importance of *infant* schools, where the young mind is encouraged to gratify itself in the acquisition of a knowledge of things : and hence, in addition, it happens that these infant schools are most successful where the teachers are most capable in communicating the knowledge of *facts* by their mode of instruction.

The reflective powers, in conclusion, are to be viewed as the architects engaged to use the materials the other intellectual powers have collected. But as the architect, however talented, could never build a substantial house without materials, so the educationist can never make a lasting intellectual fabric without an abundant supply of the materials which the perceptive and the relative powers bring. The two great evils are, that some men wish to be architects before they get materials : and some men are so engaged in getting the materials, that they despise the architects : some men are too fond of *theorizing*, others are too much confined to *mere facts*.

And here, it may be proper to refer to *logic*, as a means of developing the intellectual powers. True logic is nothing more than a collection of those *rules* which men of mind have observed common sense to follow in investigating the operations of thought. The details of the rules of logic is therefore a discovery of the processes that have been useful in mental operations. But it is quite evident, that a person, in studying logic, may fall into the same error as persons do in learning grammar, they learn the rules of grammar without understanding them : and then, having learned them, are prevented by the conceit, produced by this learning, from ever understanding them. So with logic : many know the rules of logic ; but know nothing of the strong common sense of which logic is, in the outset, the guide, and, afterwards, the strengthener.

Logic is an appeal to all the intellectual faculties when properly managed. Since the logician proceeds from *facts to general principles* and *also from general principles to facts* : that is, in the first instance, he makes the *perceptive* powers minister to his *reflective* : in the second, the *reflective* to his *perceptive*. Now, it follows, that, in a man who has *small perceptive* and *large reflective*, we should cultivate those modes of logical reasoning which would make him proceed only from facts to general principles, as thus we should cultivate his deficient perceptive powers. And, with the opposite development, we should adopt the opposite mode of logical examination.

Practical Remark, 2. As all human beings, except the idiotic, possess all these faculties, all human beings, the unprejudiced mind must perceive, have a right to the exercise of these faculties. For it is quite certain that every power which the Creator has given, was bestowed to afford to the possessors the gratification that is connected with the exercise of the power. Every being therefore has a right to seek every opportunity to exercise every intellectual power. The very circumstance of his having been created *man* is the guarantee to his right : and every state of society, which pre-

vents or throws any barrier in the way of the exercise of man's intellectual powers, is a state of society opposed to the will of the Creator. This truth phrenology holds forth; consequently, the tendency of phrenology is most exalted! because it teaches in the hand-writing of the Creator, inscribed on the human head, heaven's own will that every man should have every opportunity to exercise the faculties God has given him; and, that, no state of society can be considered as accordant to the will of the Creator, which does not, by its constitution, ensure to every man the opportunity of gratification for all his intellectual powers.

Practical Remark, 3.—That the existence of the organ of comparison as large, in most heads, teaches us the truth, that, through it the other faculties of the mind should be called into activity. In noticing this, it is, however, equally necessary to remark, that the activity of this organ is the source of numerous intellectual errors. Thus persons with large comparison are very apt to be led astray, by the influence of this organ inducing them to perceive the resemblances of things and not their differences. They therefore argue very erroneously from analogy: and, because most men have large comparison and moderate causality, they pass off for very clever men and powerful exhibitors of truth: and, in argument, very generally get the victory because persons will not have the patience, while the opponent detects the fallacies of the argument by detecting the points in which the comparisons, made use of, do not bear upon the question under discussion.

ESSAY VII.

HAVING considered the organs of the INTELLECTUAL FACULTIES, the organs of the *feelings* or *sentiments*, commonly called MORAL and RELIGIOUS, will be examined.

The discussion as to the propriety of the division of the organs will not be undertaken here. On this subject of *arrangement*, some remarks will be made at the conclusion of the history and of the functions of all the known organs : and, also, some additional remarks on the term *sentiments* : noticing merely, on the present occasion, that the term sentiment is applicable to the product of a faculty “that does not form specific ideas, but produces an emotion.”

*The first organ is that of BENEVOLENCE.**

This organ is situated above the organ of comparison, being the front organ on the central imaginary line on the top of the head, drawn upwards from the root of the nose, across the crown to the back of the head. On this line the first organ is individuality ; above that, eventuality : then comparison, and then *benevolence*.

This organ, when large, gives a great elevation to the head in the front part. The hair marks, in general, the commencement of this organ.

Dr. Gall was led to the discovery of this organ by the following circumstance. A family in Vienna had a servant, who was remarkable for his goodness. Gall was told he should take a mould of his head. He did, and observed a considerable protuberance on the superior middle part of his forehead. This directed him to observe similar characters, and he found to his perfect satisfaction, that, in these, a similar organization exists. This organ is large in Jacob Jervis, in Henri Quatre ; it is small in Bellingham, the Caribs ; and generally moderate in murderers. It is large in Thurtell however.

In animals this organ exists, and communicates, when large, a mildness and a good-naturedness : and in those, so endowed, the place in their forehead, corresponding to the organ of benevolence in man, is elevated and prominent ; while the ill-natured present a hollow at this place.

It is a curious coincidence, that, in the pictures of the Saviour of mankind, this organ is represented large : thus affording an evidence that the form of head must have been observed to exist in men, in whom the love of the human kind was manifested.

* Marked No. 15.

The man, who has this large, is kind-hearted, feels sympathy with distress. It makes the individual seek the happiness of others, and, is the grand constituent of that true politeness, which has been appropriately designated by Dr. Thomas Brown, "the moral grace of life."

It makes its possessor to attend to the little wants of others: to anticipate their wants. It places him in a different section from those Rosseau describes, "who know to do good only when they have a purse in their hand."

However, this faculty is, in its activity, quite blind. It does not dictate *what is kind*. It may lead its possessor to do much harm in attempting kind acts; which may be perpetuating the very evils which it is the object of the giver to relieve. "This faculty very much needs direction. It may lead a man to violate the moral law in neglecting to 'be just before he is generous.' Benevolence often prevents an individual from doing his duty, in cases where punishment ought to be inflicted. Hence many parents neglect to punish their children, simply on account of the pain *they themselves* experience in inflicting any punishment. The kind-hearted, 'social creatures' of society, as they are called, who are kind to the wretched, liberal to their friends, and destructive to their creditors, very frequently have benevolence large."*

The intellectual faculties require to be large, to guide benevolence. "Hence many men, feebly developed as to the intellectual faculties, support institutions, called *charitable*, but which, both in principle and practice, are injurious to the well-being of the community. They think that they are doing good and acting justly, but are mistaken; simply from their incompetency to take in all the facts and the circumstances, necessary to be remembered before a correct decision can be given upon what is good and what is just. Hence, how many of the charitable institutions of this country are BOUNTIES OFFERED TO LAZINESS, and PREMIUMS PRESENTED TO VICE."†

Benevolence says, "*Love mercy.*"

The organ, situated immediately behind that of benevolence, on each side of the central line already described, is known under the name of

The organ of VENERATION.‡

This organ was discovered by Dr. Gall.

He had a brother whom his father wished to bring up to the pursuit of merchandize. The brother wished to enter upon the duties of devotion. From his childhood his toys were church ornaments. Unable to set aside his strong tendency, he ran away from his occupation, turned hermit, till, at length, by Gall's influ-

* *Horæ Phrenologicæ*, page 32. Sold by E. Palmer, 18, Paternoster Row.

† *Ibid*, page 33.

‡ Marked No. 16.

ence with his father, he was allowed to undertake sacerdotal duties, and died in the strictest performance of these duties, and of the works of penance and mortification, which are superadded by the devotional sect to which he belonged.

Dr. Gall was led to the conclusion from a series of observations, to which, it is likely, this event gave origin, That the men, who undertake sacerdotal duties, are divisible into two classes : those who are *moved by the delight which they feel in devotional exercises*, and those who are influenced by the circumstance, that *the priest's office brings a morsel of bread* (in this country something more). He became, at last, convinced that the tendency to devotional feeling and exercises, as resulting from that feeling, is innate, and visited all kinds of places of worship, monasteries, &c. in order to observe the configuration of the heads of those who excel in devotion.

Most men, who prayed with fervour, Gall noticed, had the head bald. But as every bald man is not pious, and as women, who are generally not bald, are often extremely pious, the further observation was soon arrived at, namely, that the heads of these very pious men *were very elevated*. Lavater made the same observation. Following out this fact, evidences rapidly accumulated, establishing the situation of the organ under consideration.

The pictures of the saints present this organ as large. "It is also in this respect remarkable," observes Dr. Spurzheim, "that the head of Christ is always represented as very elevated. Have we the real picture of Christ? Have artists given to the head of Christ a configuration which they have observed in religious persons: or have they composed this figure from some internal inspiration? If the head be very high in the middle line, the hair falls down on both sides, just as this arrangement of the hair is presented in the pictures of Christ"—The Physiognomical System, by Dr. Spurzheim, p. 412, 413.

This organ has, as its function, the *tendency to devotional exercises*: which, when viewed, in reference to man, constitute *respect* and *honour*; when, in reference to the Supreme Being, *adoration*.

It is large in those nations that are inspired with a strong respect to their *nominal* superiors. In the Asiatic head this is largely developed. In the Hindoo head it is largely developed. In the sincere passive-obedience man it is generally large. And, hereupon, may be founded the explanation of the facts, that those nations which are most under the influence of *spiritual*, are equally under the influence of *civil*, despotism.

This feeling is a constituent in all acts of piety. Its simple activity seems to be devotional feeling. Its manifestations constitute *piety*; and when these manifestations are regulated by the active intellectual and moral powers, then *true religion* is seen.

This feeling is *blind*. It does not tell towards what man ought to exercise his devotional feeling. This organ is active when the Hindoo bows down before the stock of wood and stone, equally as much as when the Christian bows down before his God. In the

one case, however, the feeling is active without any direction: in the other, it is active with the intellect and the moral feelings.*

The existence of this organ, as a separate organ, will enable the believer in phrenology to explain how it is that some most devotional men are very wicked: that is, they have veneration large, and hence manifest most powerful devotional feeling; but not being equally developed in the moral feelings, they violate the law of love to their neighbours. Hence it is evident that a man's moral character is not to be estimated by the fervour of his devotional feelings.

The importance of the demonstration of the existence of a faculty of veneration, must be evident to the reflecting mind, since it establishes that a grand constituent, in the nature of man, is a sentiment of religion, and, therefore, mankind never will exist without religion. Dr. Gall himself argued that the existence of this faculty demonstrates the existence of a Deity: because as all other faculties have *objects* on which they outgo, so this must; and, such an object is the Divine Being.

This organ is large in Bruce, the Scottish king; in Martin, who burned York cathedral. It is large in Dr. Gordon, a clergyman of the Scotch establishment, whose fervour in devotional exercises is well known.

Servants, having this large, are particularly deferential in their manners.

It is a constituent in the feeling of respect which we feel towards our *parents*. The ancients seem to have been aware of the similarity between the two feelings: for Virgil designates the warrior Æneas as the "*pius Æneas*," because he carried away his *father* and the *household* gods from the flames, which consumed Troy. Filial piety is a phrase which is commonly used.

In conclusion, the highest function of this faculty seems to be expressed in the phrase,

"To walk humbly with God."

And it responds to the command, "*fear* God;" and also to the command "*honour*, (but not fear,) the king."

The situation of this organ is beautiful and eminently instructive. It forms, as it were, the central part of the head. It is the key-stone in the moral arch. It is the part to which all the other organs converge: showing that the Deity should be the end, in which all the human faculties should centre; and, also, that veneration, when coming into activity, should exercise itself in conjunction with the other organs, with which it is surrounded, and should manifest itself, thus guided, through the direction of the intellectual faculties, placed as to their organs, before it.

* For further illustrations of the difference between *piety* and *religion*; of the real character of this faculty; of the various superstitions which have arisen from its activity; the reader is referred to the third of the phrenological essays, namely that on veneration, in the work entitled *Horæ Phrenologicæ*.

*The organ of FIRMNESS**

is that which is situated immediately behind that of veneration. It is the next on the line drawn from the root of the nose upwards along the head in the centre to the back part.

Dr. Gall had observed, previous to the discovery of the site of this organ, that the quality of firmness has little relation or proportion to the intellect or the circumstances, in which the individual has been educated. A painter, named Unterburger, who was remarkable for an immovable perseverance in whatever he undertook, has the part of the head, considered to indicate the development of this organ, large. In the skull of a robber, who had been confined for a long time in prison to induce him to make known his accomplices, and, who, having been subjected to blows on this account, destroyed himself, this part was found large. After death, the two parietal bones, which unite over the situation of this organ, were found in him disunited.

Dr. Gall continued his observations, and was soon convinced of the existence of this organ.

This elevation of the head, at the back part, Lavater had observed in persons of an immovable character.

The function of this particular part of the brain seems to be that of producing determination, constancy, perseverance.

It may be determination in what is bad or in what is thought to be bad : then it is called stubbornness.

Perseverance in pursuits, not much liked by the individual persevering, seems to be greatly dependent upon this faculty.

It is large in Bruce, and the American Indians.

It is small in the bust of Mrs. H., in whose character the absence of firmness was strikingly manifested.

"Its want," observes Dr. Spurzheim, "renders men unsure, inconstant, and changeable, according to the other impressions." Its organ is situated in the midst of the organs of the other feelings, and forms, as it were, a buttress for their support.

* Marked No. 17.

ESSAY VIII.

THE organ to be noticed next is that of *Conscientiousness*.* It is situated on each side of the organ of firmness, and when large, gives a great elevation and breadth to the sides of the upper part of the head. When large, and firmness small, the head, as in the case of Mr. H., presents two elevations, and a central depression.

Dr. Spurzheim discovered this organ.

Some phrenologists profess to doubt the existence of this organ. The Essayist, however, has seen so many striking instances of its existence in development and in manifestation, that he has not the slightest doubt of its existence. In cases of insanity in which the conviction of sin is very strong, and, in which, in addition there is a feeling of despair, conscientiousness and cautiousness are large, and hope is small. The Essayist has seen many instances of this kind.

This faculty is blind. It does not determine what is just, but merely when what is just is placed before it, it approves of the same.

The importance of the establishment of this as a power of the mind, as a primitive tendency, must be evident to every reflecting mind. For hitherto philosophy has laboured hard to establish that our views of right and wrong are quite independent of such a primitive tendency: philosophy has considered all morality as adventitious, without any original tendencies in the mind that could, of themselves, lead man to approve or disapprove. Thus, Hobbes denied all original obligation of justice, but ascribes to *political enactment*, and the authority thence arising, the notions of just and unjust, with all the kindred notions involved in them: Mandeville ascribed morality to human contrivance; he considering the general praise of virtue to be a mere artifice of political skill; and that the moral virtues are "the political offspring which flattery begot upon pride:" Clarke represented virtue as merely the regulation of our conduct according to certain fitnesses we perceive in things, or a peculiar congruity of certain relations to each other: Wollaston regarded virtue as consisting in acting according to the truth of things; Hume made utility the constituent of virtue.

Such opinions have been promulgated. Dr. Brown, in his *Philosophy of the Human Mind*, has satisfactorily refuted these opinions: but it is to phrenology that mankind are indebted for establishment of the truth, that the Creator has connected with a particular portion of the brain, the sense of right and wrong.

* Marked No. 18.

It is thus that positive evidence is afforded to the declaration made in the Scriptures, that some men "are a law to themselves," this law being written upon man's original constitution, and acting in him, more or less, under every circumstance of life.

Individuals having this organ but weakly developed are very apt to believe in the truth of the expression of Bonaparte, that every man has his price. They are men of expediency; sneer at principle. They are followers of Themistocles, and not of Aristides.*

Individuals having this organ large are fond of the aphorism, "Be just before you are generous."

Remorse is connected with the activity of this organ.

Sorrow also.

Grief seems to be allied to benevolence.

The next organ is that of HOPE.†

This organ is situated anterior to the organ of conscientiousness, and on the side of the organ of veneration. When large, together with the organ of veneration, it makes the central part of the crown of the head large and elevated.

This organ was discovered by Dr. Spurzheim.

The function of this organ seems to be hope: that is, the expectation of realizing what the other faculties desire. It is thus, as Dr. Spurzheim pointed out, very different from desire: since a thing may be *desired* which cannot be *hoped* for. A man under sentence of death for a most atrocious murder may desire to be pardoned, but knowing that the case is so strong against him, he has not the least hope that he will.

This faculty seems, in its combined activity, to recognize the *belief in the future*. It appears to give the power of contemplating a future state of existence.

It seems also to be intimately connected with *faith*: faith being the substance of things hoped for; that is, the state of satisfaction arising from this power of mind being able to contemplate the realization of certain things. It is also the evidence of things not seen: in other words, the activity of this faculty produces a satisfaction so great that it gives an irresistible evidence, by the powerful effect of the perception of these things as objects of realization.

This belief in immortality, as dependent upon the endowment of man by the Creator with a particular power, is a striking evidence of the existence of immortality: and although the Christian will ever maintain that life and *immortality were* BROUGHT TO

* In the war of the Greeks with the Persians, Themistocles stated in the assembly of the Athenians, that he had something to communicate of service to the state: but that he must communicate to one single individual to decide whether it should be done. They appointed Aristides. The plan was to burn the fleet of the Lacedæmonians, which could easily be effected, being at that time lying at a port to which the Athenians could easily proceed. Aristides heard the proposal, and reported to the Athenians, that the advice might be *useful* but it was not *honourable*. The Athenians refused to adopt it.

† Marked No. 19.

LIGHT by the revelations of the Saviour of men, yet, at the same time, he may with confidence assert that a bright glimmering existed in the minds of all.

Savages seem to have this feeling. Pope refers most beautifully to this feeling in the following lines :—

Lo ! the poor Indian whose untutored mind
Sees God in clouds, or hears him in the wind ;
His soul proud science never taught to stray
Far as the solar walk or milky way ;
Yet simple nature to his hope has given
Behind the cloud-topt hill, an humble heaven.
Some safer world in depth of wood embraced,
Some happier island in the watery waste ;
Where slaves once more their native land behold,
No fiends torment, no Christians thirst for gold.

The effects of this organ, when large and too active, are to produce hope when there exists no satisfactory reason for hope. Some men are always hoping : these are endowed with this organ large. Speculators have this organ large.

It has often been observed that consumptive patients are strong in hope. They hope to get better when death is almost touching them. It would form an interesting inquiry whether this hope depends upon the phenomena of the disease, or whether the state of mind possessed by consumptive patients, is one which is connected with the development of the organ of hope, producing that neglect of care in the preservation of health, as to obtain so great a power for the disease, which at length is enabled to vanquish the powers of life.

*The next organ is that of IMITATION.**

This organ is situated on each side of the organ of benevolence, and anterior to that of the organ of hope.

Dr. Gall was led to the discovery of this organ by the circumstance that a gentleman, by name Hannibal, who had great power to represent what he had seen, asked him to examine his head, because he had a transverse furrow in the midst of it. Dr. Gall observed this : but at the same time observed, at the superior part of the forehead, a considerable elevation of a globular form.

Dr. Gall met afterwards with several individuals, who had great power of imitation, and he found them to be developed in the same part as found largely developed in Mr. Hannibal.

So many observations have been made in reference to this organ that no doubt exists both as to its situation and to its functions.

It is large in actors.

It is large in the bust of Clara Fisher.

This organ is in general more developed in children than in adults; a fact which teaches this most important lesson, that the best examples should be placed before children.

The fact of the existence of this organ in children, and the consequent tendency thence arising on the part of children to mimic those whom they behold, ought to lead instructors to watch over the young so as to prevent them from imitating objects of distress and of misfortune.

The fact of the existence of this organ, in connexion with benevolence, teaches the necessity of connecting the activity of benevolence with the activity of imitation. It teaches the necessity of presenting a Howard, an Oberlin, a Fenelon, a Watt, before the minds of the rising race, instead of the Alexanders, the Bluchers, or other warriors who have waded through seas of blood to gain glory.

This organ of imitation seems to be necessary to the good portrait painter, the sculptor.

This feeling in its unguided activity leads to spurious devotion. It has induced many fanatics to put thorns around their brows; and even some to crucify themselves.

And, recollecting that man is endowed with this organ, enabling him to imitate the objects which he beholds, how much gratitude should man feel towards the Creator, who sent the Saviour of men to exhibit an *example* of moral, intellectual, and religious perfection, so as to lead men to follow the same.

And when it is remembered that the organ of imitation lies on each side of the organ of benevolence, man should be taught that this organ should be exercised in imitating acts of benevolence, in the exhibition of those virtues which will end in producing peace on the earth, and good will amongst men.

Having thus noticed the two central lines of the moral organs, and pointed out the relations which they bear to each other, the next line, external and lateral to the one last described (namely, that embracing conscientiousness, hope, and imitation), will be examined.

*The first organ is that of WONDER.**

This organ is situated on the outer side of the organ of imitation: and gives when large a fullness and a roundness on the upper and front part of the head.

This organ was discovered by Dr. Gall. In the first fanatic whose skull he examined, he found the part correspondent to the situation of this organ largely developed. The same development he observed in the celebrated Dr. Jung Stilling, who published a work in exposition of apparitions, and who had gone through the several metamorphoses of a tailor, a tutor, a doctor in medicine, a moralist, a divine, a journalist, an illuminatus, and a visionary. At Berne, in the Maison de Detention, Dr.

* Marked No. 21.

Gall saw a fanatic, who believed that Jesus Christ, surrounded by a brilliant light, as if a million of suns had combined their splendour, had appeared to him to reveal the true religion. A gentleman at Paris asked Dr. Gall to examine his head. Gall did, and remarked, "You sometimes see visions and believe in apparitions." The gentlemen started with astonishment, and acknowledged that he had frequent visions: and added, that before this acknowledgment, he had never mentioned the circumstance to any one for fear of being thought credulous.

A man, named Hallaran, resident at Vienna, imagined himself continually accompanied by a familiar spirit. He saw and conversed with it. When 60, his genius appeared as if wishing to leave him, and favoured him with his presence only on certain days of the month.

Many similar examples Gall met with, and in all individuals having these convictions he found this organ large.

The discovery of this organ will enable the phrenologist to understand the fact, that some of the most talented men believe in the existence of disembodied spirits, and supernatural communications. It is well-known that Socrates, whose power of reasoning must be known to all, believed in the existence of a daimōn, (δαίμων), who attended him and advised with him.

TASSO, well known as the author of the splendid poem, *The Fall of Jerusalem*, asserted that he was cured of a malady under which he laboured, by the aid of the Virgin Mary and St. Scholastic, who appeared to him during a violent attack of fever.

Other instances might be adduced. One in particular is worthy of notice. SWEDENBORG, who was a most profound philosopher, and most intimately acquainted with the *facts* of almost all the *exact* sciences, experienced frequent communications with the spiritual world, and has published these revelations, which are now received as true by some of the most enlightened men in this and in other countries. In a valuable and very old picture of this individual, in the possession of the Essayist's friend, Mr. Dunn, of Pentonville, this organ is represented large, affording thus a striking coincidence between the manifestation of the power and the existence of this organ.

Having detailed these circumstances, it may be proper to inquire what is the power connected with this particular part of the brain?

It seems to be that of the perception of supernatural objects; or, perhaps, the capability of appreciation of objects that are generally defined as spiritual. It may take various directions. It may, when abused, lead to a diseased taste in producing an excessive fondness for wonders, and superstitious absurdities. It may lead its possessor to believe in dreams, in sorcery, magic, and the abuses connected with astrology.

The question occurs, Whether or not this belief in supernatural objects is an absurdity? The answer to this, viewed phrenologically is, that nothing is to be considered as essentially absurd which is connected with the activity of any particular organ, when that organ is large. Because, if we judge of the existence of the feeling

of benevolence, by finding that the largeness of the head in a particular part is attended with the manifestation of the feeling strong, it is equally just to conclude, that, if, whenever the part of the head connected with the organ of wonder is large, the capability of recognizing the existence of objects, commonly called supernatural, is proportioned thereto, the power of having belief in supernatural objects is the legitimate function of this particular part of the brain. It is true, that when the absurdities which have originated in connexion with this particular power in manifestation are viewed, the mind may be led to repudiate all activities of this power, yet reflection must convince that such repudiation is not philosophical.

The correct and fair thinker is bound to acknowledge the facts, and to seek explanation: it is the character of a fool, or of an intellectual coward, to deny the fact and to refuse the explanation.

The conclusion already stated, appears justified; namely, that this particular part of the brain has connected with it the power of appreciating the existence of spiritual objects; and, situated as it is before the organ of hope, the connexion will favor the accuracy of this view. Hope relating to the expectation of events that may arrive, and which acting in reference to a future state, gives a kind of evidence of immortality: while wonder enables the individual to appreciate the existences of that state of futurity with which hope has brought the individual into acquaintance.

These remarks on this organ have been thus extended, because many are apt to ridicule the activity of this organ; a ridicule, partly justified by the very great absurdities into which some visionaries have passed. This, however, in a properly constituted mind, will not remain long as a barrier to the belief in the power associated with this organ.

It may be proper to notice the fact that Dr. Johnson was a believer in ghosts. Dr. Chalmers, who has this organ large, wandered into the fields of astronomy, and has created a world of his own: he manifests the activity of this organ in many ways, one in particular, namely, in the coining of new words. Mr. Hazlitt and Mr. Tennant have the same mental tendency, and in each of their heads the organ is large.

Shakspeare manifests the activity of this organ in his writings, and, in the busts and the drawings of his head this organ is large.

Sir Walter Scott's bust presents this organ large, and its activity is constantly evident in his writings.

Persons having this organ large are frequent in the use of the words, *wonderful*, *astonishing*.

And here it may be proper to notice the difference between *surprise*, *wonder*, and *astonishment*, as connected with this particular subject.

Dr. Adam Smith thus defines the difference between surprise and wonder: "We are *surprised* at those things which we have seen often, but which we least of all expected to meet with in the place we find them: we are surprised at the sudden appearance of a friend whom we have seen a thousand times, but whom we did not imagine we were to see then."

“ We *wonder* at all extraordinary and uncommon objects, at all the rare phenomena of nature, at meteors, comets, eclipses, at singular plants and animals, and at every thing, in short, with which we have been either little or not at all acquainted, and we still wonder, though forewarned, of what we are to see.”

Dr. Brown makes the distinction between surprise and wonder to be dependent upon the difference *in duration* of the emotion produced by the presentation to our mind of the result unexpected by us to result from the previous order of events.

The Essayist, however, thinks that the difference is dependent upon the state of the mind itself, in reference to the development of this organ under consideration. A man, endowed with this organ large, will feel wonder, where another with the organ small will express merely surprise. So that surprise and wonder seem to be conditions of mind connected with the state of the development of this particular organ.

Thus one man will observe on seeing a candle burn, “ how wonderful it is that the candle should burn.” Another man will not perceive it at all as astonishing, but as a matter of course, and may be inclined to consider the other as a fool ; and thus difference of opinion will result, though both are equally well informed as to the chemical nature of tallow and the chemical nature of flame.

Astonishment refers more particularly to the state of mind produced by the excitement of the feeling of surprise or of wonder : in the same manner as the *understanding* refers to the state of mind connected with those mental activities which have enabled the individual to obtain *knowledge* and *wisdom*.

ESSAY IX.

HAVING now noticed the principal organs of the moral and religious feelings, the organ which, as it were, flanks these and the higher intellectual powers, namely,

*The organ of IDEALITY,**

will come next under consideration.

In regard to the discovery of this organ, it may be interesting to make the following observations.

Gall had a friend, who had the capability of composing extempore verses on the most unlikely occasions. He was, in every other respect, only of moderate talents. His forehead, immediately above the nose, rose perpendicularly, then retreated and extended itself to a considerable extent laterally, as if a portion of brain had been added on each side.

On observing this form of head, Dr. Gall remembered that he had seen this form in the bust of Ovid, the famous Latin poet.

In other poets, however, he did not find that the forehead rose perpendicularly and then retreated: but in all he found that the protuberances in the anterior lateral parts of the forehead, the situation of this organ, were decidedly evident.

He therefore began to regard these prominences as the distinctive marks of a natural talent for poetry.

Dr. Gall observed this same form in so many other poets, that, at length, he became fully convinced of the existence of a particular power, connected with this particular part of the brain.

But the circumstances which most decidedly influenced him in his decision was, that, on examining a collection of busts of thirty poets, belonging to Mr. Nicolai, of Berlin, he found that the head projected at the site of this organ more or less in all.

One additional circumstance, in connection with this organ is worthy of mention, inasmuch as it will show that this development of the head is dependent upon the *development of the brain*. When Delille died, his head was opened by Drs. Gall and Spurzheim in the presence of several physicians, and the convolutions, placed under the external prominence of this part, projected beyond all the others: a fact, highly satisfactory in connection with the phrenological doctrine, that the brain gives form to the skull.

At a numerous assemblage, an individual was pointed out to Dr. Gall, as a subject for remark. Dr. Gall at once observed that the organ of poetry, as Dr. G. now called this organ, was extremely

* Marked No 22.

developed. This individual was the famous poet, François, generally named Cordonnier, he having been bred a shoemaker.

But not only in living poets, but in the busts of those who threw, ages since, the bright beams of poetic power over this world's dark scene, this organ is found developed: a fact, which must lead to this conclusion, that sculptors either accurately represented the individuals, or had observed that poets had a particular form of head, and gave this form to the poets whom they represented.

The bust of Homer has this organ largely developed.

In the busts of Sir Walter Scott and of Lord Byron, this organ is developed: so in Wordsworth, and in many other poets, who might be named; and whose names are strung on the bead-roll of time: some as instances of talent, combined with depravity: others, as instances of talent, enlisted on the side of every thing that is lovely and glorious.

Dr. Gall, as has been stated, called this the organ of poetry. Dr. Spurzheim showed the inaccuracy of this term, by demonstrating that poetry, in its production, requires the activity of several powers, which, by themselves, do not, by their activity, form the grand constituent of poetry; but produce only accidental circumstances: which, however, though accidental, are required in a greater or less degree, to produce what is generally designated *poetry*.

Still, as all poets have this organ, it is evident that there must be some connection between it and poetry. The nature of this connection will be discovered, when the grand, the essential constituent of poetry is made known. What then is this grand essential constituent? Dr. Spurzheim analyzed the subject, and pointed out, that, in every kind of poetry, the sentiments are exalted, the expressions warm, and that there must be rapture and inspiration. "In poetry," Dr. Thomas Brown remarks, "we perceive everywhere what Akenside calls

‘ The charm,
That searchless Nature o’er the sense of men
Diffuses,—to behold, in lifeless things,
The inexpressive semblance of himself,
Of thought and passion :’

The zephyrs laugh,—the sky smiles,—the forest frowns,—the storm and the surge contend together,—the solitary place, not merely blossoms like the rose, but it is glad.”—*p. 223. Philosophy of the Human Mind.*

The most beautiful description of what poetry is, is to be found in the following extract from an article in Tait's Magazine, on the Radical Poets of Britain.

“ ‘ What is poetry ?’ has often been asked. To this question, Lord Bacon, a true poet, though he wrote in prose, replies,—‘ It is something divine; because it raises the mind, and hurries it into sublimity, by conforming the shows of things to the desires of the soul; instead of subjecting the soul to external things, as reason

and history do.' What is poetry? we ask of Hazlitt, another of the poets, who submitted neither to the links of rhyme, nor to the more majestic bondage of blank verse; and he poetically replies,—‘Poetry is that fine particle within us that expands, rarifies, refines, raises our whole being,—without it man’s life is poor as a beast’s;’ and he eloquently illustrates the definition,—‘The child is a poet, in fact, when he first plays at hide and seek, or repeats the tale of Jack the Giant-Killer; the shepherd lad is a poet, when he first crowns his mistress with a garland of flowers; the countryman when he gazes after the Lord-Mayor’s Show; the miser, when he hugs his gold; the courtier, when he builds his hope upon a smile; the savage, when he paints his idol with blood; the slave who worships a tyrant, and the tyrant who fancies himself a God; the vain, the ambitious, the proud, the choleric man; the hero and the coward, the beggar and the king, the rich and the poor, the young and the old, all live in a world of their own making; and the poet does no more than describe what all others think and act.’ These are subtle and exalted descriptions of poetry,—passionate and imaginative poetry; but they are not complete. What is poetry? we inquire of Ebenezer Elliott, a radical poet, and he forcibly and briefly answers,—‘WHAT IS POETRY BUT IMPASSIONED TRUTH?’ ”

This something, then, which exists in all poetry, must have a name. Dr. Spurzheim gave it a name,—**IDEALITY**.

In the existence of this organ, an interesting evidence is given of the old truth, “*Poeta nascitur non fit* :” a truth, which he who promulgated it, little thought would be demonstrated by a physical demonstration.

From the views above recorded, it is clear that ideality may exist where poetic rhythmical productions are not made evident: but it is equally clear that the state of mind which exists in the poet must exist in all individuals who have this organ.

Hence it is that we find many can appreciate, who cannot write, poetry. They can rejoice in splendid sentiments; and they can feel the force of poetic embellishments, though not able to put the embellishments on the productions of their own mind according to the rules of poetic vestiture.

Dr. Chalmers has a very large organ of ideality, and who that has read his sermons on astronomy, can avoid acknowledging that in him poetry exists? Who that has read some of his fine speeches, but will acknowledge that his is a poetic mind of the highest order.

Persons, endowed with this, clothe, when but moderately excited, their sentiments in the splendour of eloquence and poetic feeling: hence there is a degree of brilliancy sometimes exhibited by such individuals, so great as to astonish those who are not acquainted with the nature of cerebral organization: and hence it is, that during a speech, from the excitation produced, thoughts that breathe and words that burn arise and roll forth with a power that the speaker himself did not deem himself capable of realizing.

The existence of this organ is one grand means of polishing the character. Take two individuals in the less opulent ranks of

society. Both are left, quite unexpectedly, large fortunes. They seek an alteration of their situation in life : they both purchase a country-seat, carriages, horses, servants, and other *et ceteras*. The one has large ideality, the other is deficient. The former gradually acquires a polish suited to the society with which his new situation has brought him into contact. The latter does not receive any polish : he still retains the roughness of manners and the vulgarity of mind which he had before : his money cannot make up the want : he is cast off by the society to which his money enabled him to approach, and feeling disappointed and disgusted at the ill-treatment he imagines he has experienced, seeks, at some neighbouring public-house, society more congenial to his wishes ; and, at last, often by the extravagance thus induced, passes back to the condition in life from which he had been temporarily raised by means of his gold.

Ideality in the one case, and a want of ideality in the other, constituted a principal cause in the difference of results.

In the heads of murderers this organ is generally found deficient : and men of a degraded and grovelling character have a similar deficiency.

It seems to lead its possessors to aim at perfection : and this aiming at perfection may take almost an infinity of directions. It may act in a shoe-maker in making him to seek to give an exquisite finish to the shoe he forms. It may impart to the chisel a power of giving a touch, like that of Phidias, to the marble. It may even clothe drapery in all the beauties of Græcian elegance : and finally, it serves to elevate the mind above the mere grossness of vegetative existence.

ESSAY X.

IN this Essay, that class of faculties known under the name of the ANIMAL FEELINGS, will be considered. Their organs are situated at the back and the inferior parts of the side of the head.

This situation would at once demonstrate their inferiority to the moral feelings and intellectual powers: at the same time declaring their essential use in enabling man to preserve his existence as a being. This situation will further declare that these faculties are powerful in giving *impulses* to act: impulses, however, not to be manifested in act till approved by the moral feelings, and guided by the intellectual powers; so that man must be led to the conclusion, that the order adopted by nature, is that *impulses* should spring from the animal: these impulses should be tested by the moral, and being there as it were sublimed and purified, be directed by the intellectual, and then descend into the eyes, voice, and hands, and other members of the body, thus obtaining expression.

*The first organ to be noticed is that of SELF ESTEEM.**

The discovery of this organ was singular.

Dr. Gall met with a beggar, of a very singular character, at a time when he was engaged in an inquiry into the causes of mendicity. He thought that mendicity was dependent upon want of foresight, which the form of the head of this singular beggar seemed to justify; for, in the situation of that organ, which is large in all noted for circumspection, his head was very narrow.

Gall moulded the head of this man, and found, at the upper and hinder part of the median line, a protuberance, which, he was convinced, must be dependent upon the development of the brain at this part. Before this, he had never observed this development. He examined minutely into the man's character and disposition, and found, to his great astonishment, that the cause why he had adopted the life of a mendicant, was, that he was too proud to work. Though Dr. Gall had a difficulty to conceive how pride should not make him ashamed to beg, he determined to investigate his statement in relation to this organization.

After this he met with a prince at Vienna, who made himself remarkable by his ridiculous pride, by his stiff walk, and by the habit of referring, on every occasion, to his ancestors. He happened to be bald, and Dr. Gall observed, that, in him was the same organization as that which he had noticed in the mendicant.

He began now to think that pride might be a fundamental quality of the mind, dependent upon a particular organ of the brain.

* Marked No. 23.

A physician lived at Vienna, who, at consultations, would always go in and come out first, would always sign his name first, and exhibited other indications of pride. Dr. Gall found in his head this organ developed.

In a young woman, aged 18, at Heidelberg, this organ was found large. This girl appealed to the Deity on the most trivial occasions: she carried her head raised and thrown back; and, though the daughter of a fruitseller, spoke her language with peculiar purity, and sought the acquaintance of those only who ranked above her.

In establishments for the insane, numberless instances of diseases of this organ may be met with. How many imagine themselves to be kings, emperors, generals. Pinel relates the case of an insane individual who regarded all other men as particles of dust. He records the following curious circumstance connected with insanity as arising from this faculty: "Three madmen who believed themselves to be sovereigns; and who individually took the title of Louis the XIVth. were disputing respecting the royal rights with very great vehemence. The attendant, seeing them, went up, and drawing one aside, observed with a serious look, "Wherefore do you enter into dispute with those people, who are clearly mad? Is it not known that you alone ought to be acknowledged for Louis the XIVth?" Flattered with this homage, he retired immediately, regarding the others with a disdainful look.

The natural language of this organ seems to be the throwing the head backwards, at the same time holding it erect.

It is exhibited very early in life. Children in their games choose different offices. One will be a king; one a general; one an emperor; and other children submit readily to the despotism of these little despots.

It is related that the pilgrims, on their return from their visit to the tomb of the prophet, Mahomet, at Mecca, carry their heads uplifted, very different from the attitude assumed previously to their arrival.

The legitimate function of this faculty is to give a sense of dignity; a feeling of self confidence; a power of being contented with one's self.

It is blind, however, in its activity. It does not teach whether the individual is justified in the conception he forms of his dignity, or whether his self confidence is well grounded.

It is very useful to the patriot. It must have been large in a Wilberforce, a Granville Sharpe, an Oberlin, a Howard, men who have persevered in the pursuit of what was good under difficulties the most numerous and oppressively great.

It is essential to the advocate of any new scientific, religious, or political view; and viewed in relation to these uses, how beautifully appropriate does its situation, behind the organ of firmness, appear.

It leads to the use of the word I. Cobbett had it large; and in his writings this personal pronoun stands very prominent.

According to its direction, it may lead to very absurd manifestations of pride.

Thus, the pride of ancestry affords very commonly exhibitions of the absurdities arising from the activity of this faculty.

It is the foundation both of the aristocratic and the democratic feeling: *aristocracy being the self esteem in the FEW, democracy the self esteem in the MANY.*

The true aristocrat believes that all men are made for him: there is very little doubt that many believe that some men were made upon purpose to work for them: just in the same manner that our forefathers believed that the sun was made for our earth, and actually had the trouble of going daily its journey around our little planet.

The circumstances in which the nobles of the earth are placed afford great palliation of their erroneous views, when they talk of their rights in reference to game, which they embody in those abominable laws, called the *game laws*; of their rights in reference to the taxing other people to support their creed, under the form of a church establishment: such self-complacent talking is to be referred, in a great measure, to their education and their organization combined, both which have a strong tendency to develop their self esteem.

And, as a curious recognition of the power of these feelings as dependent upon self esteem, the fact is worthy of notice that the members of the House of Lords are bound by their *honour*, and not by the taking of an *oath*.

This organ, when large, produces the *love of rule*; and therefore when this is largely developed in the many, the democratic feeling is created: because feeling a love of rule, they feel a dislike to be ruled except by themselves. And, wherever this is the case, the *representative* form of government is sure to be adopted: in other words, that form of government in which a man rules himself by the medium of his representative: hence, also, the explanation of the fact, that the representative form of government has so strong a hold among the British; self esteem being generally well developed in the head of Britons; as is evidenced in manifestation by the well known expressive phrase, John Bullism, a name for gross rudeness, founded upon large self esteem.

This feeling is a indirect constituent in the love of liberty: though it does not of itself produce that love of liberty, which consists in extending such an amount of freedom to think and to act to others as is compatible with the same amount to ourselves. For, it is to be lamented, that the most *noisy sticklers for liberty, out of doors, are the greatest tyrants at home*; a fact, easily explained by the existence of a large organ of self esteem, without a corresponding size of conscientiousness and benevolence.

It must have been large in those who signed the American declaration of independence; and Mr. Lance, who had profiles of many who signed that celebrated declaration, stated to the Essayist, that the organ is represented large. It is pleasing to look at the clearly written names of these men as signed to this declaration: a clear-

ness showing that they felt the dignity of men in signing the same. As an indication of the existence of this organ largely developed in the American head, the circumstance is worthy of notice, that servants are not called *servants* but *helps*.

This organ being large in the British, makes them feel indignant when any aristocratic lordling talks of taking care of the people in spite of themselves. Such assertions give great offence, because self esteem, exhibited actively in such assertions, offends self esteem in others.

This organ being large and not enlightened by the intellect, gives persons erroneous opinions of themselves. It made the fly who sat upon the revolving chariot wheel cry out, when the dust was caused by the revolving of the wheel, "lo! what a mighty dust am I raising:" and it makes many human flies imagine themselves to be the causes of events, with which their actions have scarcely the remotest connection.

Its legitimate, its exalted activity is, when it acts with the desire of making a man seek to get the rule over his other animal feelings. When it makes him to scorn to do a dishonourable, an unjust, an unkind act: when it persuades him to adhere to a truth which acknowledges no one besides himself as its friend.

Its legitimate use is, when it acts on the mind of him who professes to be a disciple of Him who taught, whatsoever ye would that men should do unto you, do ye also unto them, so as to make him avoid the doing anything disgracing his character as a christian. In other words, its legitimate use is to induce the individual to ask, as Paul did the Corinthians, "Know ye not that ye are the temple of God, and that the Spirit of God dwelleth in you. If any man defile the temple of God, him shall God destroy, for the temple of God is holy, which temple are ye." 1 Cor. chap. iii. 16, 17. And again in the following phrenological passages, "Be ye not unequally yoked with unbelievers: for what fellowship hath righteousness with unrighteousness? And what communion hath light with darkness? And what concord hath Christ with Belial? Or what part hath he that believeth with an infidel? And what agreement hath the temple of God with idols? For ye are the temples of the living God." 2 Corinthians, chap. vi. 14, 15, 16, 17.

The existence of this organ therefore settles the long discussed question as to the *propriety of pride*. Its existence teaches that the Creator has endowed man with a feeling of pleasure at the contemplation of his own excellence, not as self derived, but as a gift bestowed by the Creator: a feeling, differently possessed by different individuals. Those who have this organ small are predisposed to that humility, which consists in the not having the tendency of mind to contemplate with pleasure its own excellence.

The situation of this organ further teaches *wherein pride is proper*, and wherein improper: for it is quite evident that as this organ is situated higher than the organs of the other animal feelings, that therefore we are not to be proud of the points in which these may, in reference to the attainment of their objects of gratification, make us superior; but that we are to have the feeling of pleasure

at the contemplation of our excellence in relation to the activity of our moral feelings and of our intellectual powers. When the organ of self esteem takes this direction, it can never become in its manifestation improper pride : because the mind is perpetually discovering something more excellent to which it ever seeks to attain, and which, to be attained, preserves the pride in its state of humility ; and when attained, something else is discovered which is still superior ; and, thus, humility, we may assert, is begotten upon self-esteem by the intellectual faculties and moral feelings.

“ It is in this way,” observes Dr. Thomas Brown, that “ the very religion, which ennobles man, leads him not to pride but to humility. It elevates him from the smoke and the dust of the earth : but it elevates him above the darkness, that he may see better the great heights that are above him. It shows him not the mere excellence of a few frail creatures, as fallible as himself, but excellence, the very conception of which is the highest effort that can be made by man ;” “ exhibiting thus constantly what it will be the only honour worthy of his nature to imitate, however faintly, and checking his momentary pride, at every step of his glorious progress by the brightness and the vastness of what is still before him.”

“ May I not add to these remarks,” observes this gifted writer, “ that, it is in this way we are to account for that humility, which is so peculiarly a part of the Christian character, as contrasted with the general pride which other systems either recommend or allow ? The Christian religion is, indeed, as has often been sarcastically said by those who revile it, the religion of the humble in heart ; but it is the religion of the humble, only because it presents to our contemplation a higher excellence than was ever before exhibited to man. The proud look down upon the earth and see nothing that creeps upon its surface more noble than themselves. The humble look upward to God.”

The combinations of this faculty with others are almost infinite. One combination will serve to explain still more fully the functions of this particular faculty. It is the combination in its fully developed state with benevolence, and in its weakly developed state with the same organ. In the latter case the individual will speak with the greatest delight of those institutions, called the charities of our country : the other will be inclined to disparage the charities, not because he does not feel charitably, but because he thinks that men have no right to be placed in the conditions requiring these charities : that man ought to be so independent as not to need these charities, and, that, in a proper state of society, he would not need these aids.

*The next organ is that of LOVE OF APPROBATION.**

This organ is situated on each side of that of self-esteem : the organ of self-esteem being on the central line before referred to, and this organ on each side. When large, giving a rounded form to this part of the head.

* Marked No. 24.

Gall discovered this organ while investigating the organ of self-esteem. Gall happened to meet with a woman, who imagined herself to be the queen of France. On examining her head he was much astonished to find that she had, in the situation of the organ of self-esteem, where he expected to find a protuberance, a depression, and on each side of the site of this organ a round and large protuberance.

He soon perceived in connection with this fact, that the alienation of this woman differed essentially from that of men mad from pride: the latter being serious, calm, imperious, arrogant, and assume a majestic manner: whereas, in those similarly alienated with the woman referred to, a constant talking, blandishments the most winning, annunciations of high birth and great riches, and promises of great favours and honours; in a word, a mixture of affectation and ridiculousness are conspicuous.

Dr. Gall was thus led to see the difference between pride and vanity: and pointed out, that, while the proud man is penetrated with his greatness, and contemns all others, the vain man regards intensely the opinions of others, and seeks their approbation: that while the proud man expects that mankind will come to discover his merit, the vain man knocks at every door to attract attention to himself: that while the proud man despises marks of distinction and ill-advised praise, the vain man is nourished by the most absurd flatteries: and, finally, that while the proud man will not descend from his dignity, the vain man will abase himself to gain the praises for which he lives.

Persons, having this organ large, are anxious to know what persons think of them: they love praise.

It is a source of the greater part of politeness. It has been appropriately named the *drill serjeant* of society.

It is perfectly blind. A man may be vain to be known as the greatest drinker: or the most gay: it may be that he may wish to be known as wearing the best fitted coat: drinking the best wines: as driving the best blood horse: as wearing well a bushy set of whiskers and mustachios.

Women have this organ generally larger than men. Artists in drawing the feminine head, give a particular roundness at this part of the head: a circumstance indicating that this form corresponds to nature.

It is the basis of the love of fame: which love, like pride, has been condemned, but equally improperly. All that is required to solve these questions regarding proper activity, is to regard the situation of the particular organ.

It is situated above the other animal feelings, but behind the moral: and the same remarks are applicable to it as to self-esteem in the same relation.

As man is placed in society, he is bound to be influenced by that society: and love of approbation is to bring him under that influence.

It may be urged against this love of praise that man is commanded not to seek the praise of men: but the evil is not in seek-

ing the *praise of men*; but it is in seeking the praise of men *rather than the praise of God*. And this praise of God, though the sceptic sneers at it, and his sneer is in part sanctioned by the abominable practices that men have asserted as being done to the praise of God, is nothing more than what the sceptic himself must acknowledge ought to be the real object of search to every enlightened mind: namely, the praise of one who is good, just, and infinitely wise: the praise of one who appeals to the moral feelings, and of whose infinite excellencies the moral feelings are slight shadows: for God is not here to be viewed as an abstract first cause whose praise we are to seek; but as the *representative* of the moral feelings of man in an *infinite* degree: and man here is to be understood as expressive of the active animal feelings.

The power of this faculty, as affording, in its activity, a stimulus to exertion, is forcibly declared by Dr. Brennan's remark at the opening of the Belfast Academical Institution in the year 1814, that, in the experience, which he and his colleagues had had, "*A chaplet of laurel is, in our minds, worth a cart load of birch.*"

The universal diffusion of this power in all periods of history, and in all classes of society, is evidenced by the fact, that, in almost all nations, the *laurel*, the index of approbation, has been a satisfactory reward for deeds of the greatest prowess. The gladiator would endanger his life: the poet, his fame: the wrestler, his body: all, for the laurel.

It is true, that, in modern times, the ribbon, the garter, the epaulette, the medal, are substituted: but they are virtually the same, being conventional signs, expressive of the same feelings as the laurel used to express at former times.

And when we consider the power which the capability of gratifying this feeling gives to those who have the means, we can readily perceive the cunning of those who identified the king with the title "the fountain of honour;" thus connecting with the kingly majesty the highest point in which man can be influenced.

The day, however, is fast coming, when the king will be no more considered the fountain of honour, than he is now considered to be in this country the *fountain of power*. It may do for despotic countries; but in this country, even now, the king would not venture to give titles unless with the approbation of his ministers: nor they without the approbation of the representatives of the people; and thus it happens, that the principle is rapidly gaining ground, that the people are the sources of power as well as of honour. The king may be the outlet through which the power flows, that is, the executive; the outlet through which the honour flows: but being the *fountain* and the *outlet* through which the stream flows are two very different things, and the difference is beginning to be understood.

Passing forwards and sideways,

*The next organ arrived at is that of CAUTIOUSNESS.**

* Marked No. 25.

This organ constitutes, as it were, the boundary of the posterior upper tier of organs; a tier, consisting of the organs of self-esteem, love of approbation, and cautiousness.

Gall was led to the discovery of this organ by the circumstance that, having met with a prelate, who never could arrive at the end of a conversation without beginning again and again; who used often to stop in the middle of a conversation to reflect whether or not he had left out something; who used, on the most trivial occasions, to adopt numberless precautions; he observed this part of the head very large in him. A short time afterwards he, at a public examination, sat behind this gentleman, who was seated beside a counsellor of regency, called Cacadubio, from his great doubting: and Gall was struck to find that the heads of both agreed in this particular organ being large. Gall hence inferred that it might be possible that irresolution, indecision, circumspection, might be connected with this part of the brain.

The differences between individuals in this respect of cautiousness every one must have observed.

This feeling of cautiousness is often exhibited in a diseased state.

It is larger generally in females than in males. Those animals that find their safety in flight, are led by a female: those that attack their opponents, by a male.

Many animals, that see by day, catch their food by night.

Gall caught, within a given time, twenty squirrels, and there was not one female amongst them: forty-four cats and only five females: five hundred bears were caught in Virginia, and only two females. In the year, 1816 to 1817, in France of the wolves killed one thousand eight hundred and ninety-four were males, six hundred and twenty-two females: circumstances, indicating the greater cautiousness of females.

Persons having this part of the head large, frequently remark, "Take care:" they use the word "but," frequently.

When active, it produces fear: and when suddenly called into activity among a number of individuals, produces a *panic*.

An individual with this organ large, and that of hope small, is apt to be gloomy, and to be filled with apprehensions both as to the present and as to the future. Preachers so constituted, preach gloomy views of Him, who is beautifully described as "LOVE."

It seems, in some instances, to predispose to suicide.

Children who have this large, should not be beaten because they are timid. They should be encouraged.

Cowper gives an excellent description of the absurd activity of this organ:

"Dubius is such a scrupulous good man—
 Yes—you may catch him tripping if you can.
 He would not, with a peremptory tone,
 Assert the nose upon his face his own;
 With hesitation, admirably slow,
 He humbly hopes—presumes—it may be so.
 His evidence, if he were called by law
 To swear to some enormity he saw,

For want of prominence and just relief,
 Would hang an honest man, and save a thief.
 Through constant dread of giving truth offence,
 He ties up all his hearers in suspense;
 Knows what he knows as if he knew it not,
 What he remembers seems to have forgot;
 His sole opinion, whatsoe'er befall,
 Cent'ring at last in having none at all."

*The organ of SECRETIVENESS**

is next to be considered.

Gall had observed, when a boy, one of his schoolfellows who had many good qualities, but was always playing tricks. He held his head in a particular direction; just as a cat does when preparing to pounce upon its prey. Another companion Gall noticed, who was candour itself in appearance, but who was most perfidious in character. Gall observed that the head in both these was large immediately below and little forwards from the organ of cautiousness. Gall found afterwards in a great number of cunning, deceitful individuals, this part largely developed; and hence called it the *organ of cunning*.

Dr. Spurzheim, as the fundamental feeling seems to be the tendency to secrete, or to be secretive, called the organ, that of secretiveness.

This organ is blind. It may be very useful in enabling us to restrain the exhibition of feelings which might be unpleasant to others. Besides there are many feelings which we cannot prevent entering the mind, but which we should not desire that others should know that they enter there.

Othello, in act iii. scene 3, is represented as saying,

"Utter my thoughts! why say they are vile and false?
 As where is that palace, whereinto foul things
 Sometimes intrude not? Who has a breast so pure,
 But some uncleanly apprehensions
 Keep leets and law days, and in sessions sit
 With meditations lawful?"

The proper direction of this faculty is in the fulfilment of that command, "be wise as serpents, but harmless as doves."

This organ requires particular watching over. Parents are apt to encourage it in children when young: and the organ becomes to the parent, when the child becomes a youth, the source of great troubles and inconvenience.

The manifestations of this organ in combination with other organs are very curious: the combination with cautiousness is very natural; because the two organs are situated close to each other, in fact their convolutions run into each other; and hence the activity of cautiousness, will have a natural tendency to call secretiveness into activity: and hence can be explained the cunning of an oppressed people, and hence perhaps may be explained, that the diplomatists of despotic powers are the most astute politicians.

* Marked No. 26.

ESSAY XI.

THE part of the brain situated immediately before the organ of secretiveness, and nearly on a horizontal line with it, is called

*The organ of ACQUISITIVENESS.**

This organ corresponds in situation to the anterior inferior angle of one of the bones of the skull, called the parietal. It is situated at the temples, and gives a great width at this part of the head, forming one of the lower tier of organs at the side of the head.

Gall was led to the discovery of this organ by the facts, that, having assembled boys and other individuals of the most uneducated class, and having given them stimulants so as to make them declare their thoughts, some boasted of their thefts, others expressed horror at such conduct, and others seemed indifferent.

Gall separated these different characters from one another, and examined their heads. In the boasters, he found a fullness at the site of this organ. In those who expressed disapprobation, he found the head flat at the site referred to; and, in the third class, the development varied.

The question then occurred to Gall, Is it not possible that the development of the first class may be connected with an instinct to steal?

Gall, as physician to a deaf and dumb institution, found that the same organization existed in those living in the asylum who were in the habit of stealing: also in a number of individuals, confirmed thieves, who came under Gall's notice.

Many cases are on record, in which, under the influence of *disease*, the propensity to steal has been developed in a high degree of intensity.

Many cases are on record, in which individuals quite free of want, and otherwise of strong moral feelings, such as Saurin, the pastor of Geneva, the wife of the celebrated physician Gaubius, and others, were given to stealing.

A curious case is recorded by Gall of a Calmuck, who, being brought to Vienna, was forbidden by his priest to steal. He became unwell and nostalgic on account of this restraint: at last, the priest gave him permission to steal, but to return the things stolen. During the consecration of the mass he stole the priest's watch, and, leaping with joy, returned it when the mass was over.

Dr. Gall called this the organ of theft: but Dr. Spurzheim, perceiving that the name of an organ should not be deduced from the abuse, but from the primitive power connected therewith, called the organ the organ of covetiveness; now named ACQUISITIVENESS.

The tendency to acquire seems to be the primitive function of this particular part of the brain. It does not direct *what* to acquire: or in *what ways*. If one acquires without a proper regard to the rights of his fellow man, it is then *stealing*.

* Marked No. 27.

It has been objected to the existence of this power that the regard for, or the sense of, property is the production of law: and as theft implies the pre-existence of property, there cannot be a *primitive* power to give rise to stealing.

The answer to this is simple. Animals do not make laws: and yet they have a sense of property. Swallows take possession of the same nest. Cows return to their own place in the bier. Bees guard the entrance to their hives.

Children, moreover, have this sense. "*That is mine*," is often the angry utterance of a little fellow, when some other little one takes away any thing belonging to him.

The acquisitiveness must be directed: and becomes, when properly directed, a most valuable organ. "Covet earnestly the best gifts," is an apostolic command. "Lay up for yourselves treasures in heaven," is a divine command.

And when it is considered that all the great improvements in society have been effected through the aid of accumulation, the importance of this tendency to acquire must be apparent. The knowledge of the present times is the accumulation of past ages: the massive buildings, the domestic conveniences, the splendid machinery, the improved laws, are the results of accumulations, physical, mechanical, intellectual, and moral, of men of past years.

CAPITAL itself is nothing but the accumulations of surplus labour. Man is an accumulating animal; and there can be nothing wrong in accumulation: the evil is in the application of that which is accumulated.

*The next organ is that of CONSTRUCTIVENESS.**

This organ is situated anterior to acquisitiveness, and occupies a position a little upward, and backward from the outer angle of the eye.

Gall observed, that mechanics appear to have the face as large at the temples as at the cheeks, presenting a parallel character; a peculiarity of form, which must be dependant upon the organization of the brain. After making very numerous observations upon this subject, he came to the conclusion, that a particular disposition to mechanical arts is indicated by the development of the brain at this part.

This difference of form is perceptible, not only in man, but also in animals. The skulls of animals which build are much larger at the site of this organ, than the skulls of those which do not build. Contrast the skulls of the rabbit and of the hare. In the beaver, the marmot, the field mouse, this organ is distinctly expressed.

This organ seems to give the tendency to *construct*. The nature of its constructions will depend upon the other developments of the individual.

It is large in Brunel, in whom mechanical constructive power is so evident: in Haydon, in whom the intellectual and pictorial constructiveness is so evident; and, in others, whose constructiveness seems to be active in arranging the parts of an argument.

* Marked No. 28.

This organ is essential to an architect ; to the clever milliner.

This power is manifested in activity by idiots : so that it cannot be dependant upon the intellect.

During insanity, this power developes itself into activity. Dr. Spurzheim knew a lady in Paris, who, every time she was with child, felt a strong propensity to build.

When individuals have this large, they often spend their fortunes in buildings and in alterations.

*The next organ is that of GUSTATIVENESS.**

For the discovery of this organ, the science is indebted to Mr. Crook, and to Dr. Hoppe.

This organ is situated immediately before, and on a horizontal line with, destructiveness : and, when large, gives breadth across the temples, above and a little behind the cheek bones.

The function of this organ is not fully understood. Some have imagined that it is connected with the desire of taking food : others that it gives the power of discrimination as to *taste*, &c.

As yet its real functions are not accurately defined.

The next organ is that of DESTRUCTIVENESS.†

The history of the discovery of this organ is pregnant with instruction, both as to the mode adopted by Dr. Gall in making observations, and also in reference to the immense amount of evidences that have been accumulated to demonstrate its existence.

Gall, in comparing the skulls of animals, was struck with the remarkable difference subsisting between those of graminivorous and carnivorous : the skulls of the carnivorous projecting over the opening into the ear, called the auditory meatus, those of the graminivorous not extending beyond that opening. He found the same difference to exist between birds of prey, and other birds.

Gall did not deduce any conclusion from these facts for some-time. After this he received the skull of a parricide, which he put aside : after this he received the skull of a thief, who assassinated the plundered. Gall placed these two beside each other, and examined them often, and was very much struck with the fact, that, though differing in many respects, they agreed most conspicuously in a very remarkable protuberance immediately above the auditory meatus. He found this protuberance in other skulls ; those of two homicides, in particular, struck him as having the same organ large.

Dr. Gall then began to reflect upon the difference between the skulls of graminivorous and carnivorous animals, and as murderers have the form of head existing in the carnivorous, the question occurred, *Is there a connection between this conformation and the tendency to kill?*

At the first, Dr. Gall revolted at the idea, but knowing that the discovery of the tendencies of nature, is one essential step to the regulation of human conduct, he determined to persevere in the inquiry.

Dr Gall further noticed, that the mere feeling of hunger is not

* Marked with a Cross.

† Marked No. 29.

the cause of animals destroying other animals, because some destroy more than they can eat: because some dogs love the chase, others cannot be brought to love it: and because some dogs being fed upon vegetable diet, dislike game, and yet love the chase.

Dr. Gall had a dog that destroyed every living animal that he could get at. He always seized them at the neck, and never ate them.

Dr. Gall notices the fact, that naturalists have arranged animals according to their teeth; and, the opinion, that the endowment of the carnivorous, with teeth of a peculiar character, is the cause of the tendency to kill. Dr. Gall, however, properly remarks, that the difference is great between an *instrument producing a tendency*, and the instrument being made *in accordance with a tendency*.

That the disposition to kill cannot depend upon the teeth, Dr. Gall observes, is evident from the facts, first, that if the tiger had the teeth of a sheep given to it, it would not take away its carnivorous character: second, that every slaying animal has a different method of killing its prey; and third, that the hamster and others, which have the teeth of a graminivorous animal, are very blood thirsty.

As a further evidence of the accuracy of the view regarding this organ, Dr. Gall states, that the organ is larger in the eagle and falcon than in birds who are destructive of life, but less so than these birds.

Gall noticed in animals that destroy their prey differences in development: some, who were very destructive, had the organ large: others, not so destructive, had the organ small. All cats, good mousers, have this region of the skull large.

Leaving these animals for man, the question occurs, *is man naturally "carnassier?"*

Man is *carnivorous*, so far as can be judged from his teeth. He, therefore, has to feed upon flesh, and, as such, like other animals, has an impulse to kill: and that this impulse differs, in degree, from the simple pleasure of seeing killed, to the intense desire to kill.

This assertion is justified by facts. In earliest infancy, some children exhibit a pleasure in tormenting animals, others are quite the contrary. Gall met with a student, who frightened his fellow students by the cruelties he practised upon inferior beings. He studied surgery to gratify his passion. A rich Dutchman allowed the butchers a certain sum to allow him to kill the beasts.

Many men seek after executions. They delight in them. The celebrated La Condamine did so; and one day pushing forward to see an execution, and, being repulsed, the executioner observed, "Let the gentleman pass, he is an amateur." Professor Briggman, at Leyden, mentioned to Dr. Gall a priest, who had so strong a delight in seeing persons killed, that he took the chaplaincy of a regiment. This man always killed the animals for his own kitchen. He corresponded with the different executioners to know what executions were to take place: which he attended. On the field of battle, some soldiers delight in killing, and slay after the necessity ceases; others do not

In the chronicles of brigandage, instances too frequent occur of men, who, not content in mere stealing, have delighted in tormenting and killing without necessity. Gall relates the case of John Rosbeck, who invented the most cruel kinds of torture. He was subjected to severe punishment; but with no benefit: when set at liberty he committed many murders, and was taken and executed.

About the beginning of the last century, many murders were committed in Holland. The murderer was undiscovered. At last an old violin player, who visited the village, was suspected. Arrested and taken before the magistrate, he confessed to thirty-four murders which he had committed, without any enmity or desire to rob the parties, but merely because he felt an extraordinary pleasure in so doing.

Prochaska relates, in his works, two cases, one of a Milanese woman, who slew children, sucked their blood, and ate of their flesh: and another of a man, who killed a traveller and his daughter in order to devour them.

Gall knew a girl, who was the child of a cannibal, and yet, though brought up away from her father, felt the desire to eat human flesh.

Many similar cases of delight in cruelty are recorded in Gall's writings.

Gall concludes his statements by asking the too much justified questions, *Is there a spot upon the earth not dyed with human blood? What various instruments of torture and of destruction exist! And why, ah! why is military glory placed above all others?*

He then refers to Caligula, who gave innocent people to be devoured by wild beasts: who forced parents to assist in the death of their children: who amused himself in putting questions to those in torture: who wished that the Roman people had but one head, so that he might strike it off at one blow. To Nero, who poisoned Britannicus, massacred his mother, and the husband of a lady to whom he had offered violence: who sacrificed the objects of his lust: killed Octavia his wife, and some of the noblest worthies of Rome: who set fire to the four quarters of Rome, and mounted a tower to have the pleasure of beholding the spectacle: who burned the Christians in pitched jackets, burning them at night so as to serve, as he said, for lights.

The existence of all these deeds of horror necessarily leads the mind to the conviction, that a power must exist in the human mind, of which *these are the abuses*.

Gall came to a conclusion more repugnant than this; and called this particular part of the brain, that he had found so large in murderers, the *organ of murder*.

Dr. Spurzheim, however, satisfactorily showed that murder is one of the abuses of this organ, and not its legitimate function. He showed that this gives the *tendency to destroy*. The objects destroyed may be animate or inanimate.

The great difference between this organ, as associated *essentially* with *murder*, and as associated merely with the *tendency to destroy*, will be evident, on remembering that it is not in the *mere destruction of life* that murder consists, but in the destruction of the life of

a being who is *endowed with certain powers*. Destroying a dog or a cat we do not call murder. Destroying a human being, that is, a being endowed or supposed to be endowed with certain feelings, then the act of destructiveness is designated murder.

The term *destructiveness*, however, was employed by Dr. Spurzheim to indicate the particular power connected with this part of the brain.

It seems to impart energy to the character. Is a constituent in anger. Is a kind of protector to the possessor, giving a particular tone to the voice, which warns an aggressor of his danger.

Children and persons, who have this large, are apt to be passionate, and, with small benevolence, cruel.

The intimate connection between the activity of this organ in the exhibition of anger, and the activity of it as connected with the perpetration of murder, is evidenced by the statement of Divine Wisdom, "*He that is angry with his brother, without cause, is A MURDERER.*"

Destroying any thing seems to afford satisfaction to this organ. The proper direction is to destroy, by proper means, what is evil in our character, and in the institutions by which we are surrounded, and which are continually exercising an influence upon the well-being of society. Paul converted was as destructive as Saul unconverted; the direction being different, constituted the great difference.

Destructiveness is an excellent organ.

ESSAY XII.

THE organ situated behind, and little lower in position than the organ of destructiveness, is

*That of COMBATIVENESS.**

The site of this organ on the skull is indicated by the inferior and mastoid angle of the parietal bone.

Dr. Gall was led to the discovery of this organ by observing the dispositions of boys and others collected from the streets. He gave them wine, and when excited, made them fight each other. Some enjoyed the practice; others did not, being peaceable and timid. In the former, the head at this part was large: in the latter, the head at the same part was flat and depressed.

The prominence he found large in brave officers, in duellists, and in quarrelsome persons in general. Mr. Hawkins has observed it large, generally, in the Prussian army, and small in the Austrian army: a difference of organization manifested in the facts, that the Prussians are very fond of fighting; the Austrians, not. Mr. Hawkins has noticed the great difference in shape of head at this part between the *militia* men, the *volunteers*, and men of the *regular army*; the last having this organ large.

Dr. Gall found that courageous animals are characterized by a similar protuberance: That a horse that is bold and sure can be known from a horse that is shy and timid, by the form of head. Game cocks and game hens have their heads larger in this part than domestic cocks and domestic hens.

Dr. Gall considered this organ as connected with *self-defence*. It seems to be connected with *physical* courage, in contradistinction to *moral* courage, which is the result of combined firmness, conscientiousness, self-esteem, and the higher organs.

Dr. Spurzheim called it *Combativeness*, a name now generally received.

It has been imagined that courage depends upon *strength*. This is proved not to be the case by the well-known fact, that many most powerful men are not courageous, but cowards. The strongest animals too, are not the most courageous. A great difference exists between *confidence* and *courage*. A timid man may gain confidence. Confidence is produced by the conviction arising from the successful performance of any act: whereas, courage would inspire to the actual performance, from the success of which, in the timid man, confidence springs.

This organ is exhibited large in the Caribs, king Robert Bruce, the ancient gladiators; and small in the Hindoos and Ceylonese.

* Marked No. 30.

The remaining organs constitute what has been named the DOMESTIC GROUP.

A line drawn from the root of the nose across the central part of the head has been often referred to. On this line the first organ is individuality, then eventuality, comparison, benevolence, veneration, firmness, self-esteem, and then

*The organ of INHABITIVENESS.**

This organ is, therefore, situated immediately below that of self-esteem.

Dr. Gall considered this organ and that of self-esteem to be one and the same : but cases occur in which the organ of self-esteem is large and this is small : and the reverse.

Dr. Gall found this part of the head large in those animals, such as the chamois, the wild goat, that love elevated situations.

Every animal, it is well known, has its own peculiar place. The little ducklings run to the water as soon as they are hatched. Other young animals stay upon dry land. Some like high regions : some prefer the plains. Some birds delight in hovering in the air : other birds, whose power of flying is greater than those who hover, do not hover in the air.

Dr. Spurzheim, conceiving that this part of the brain gives the tendency to remain in the place inhabited, called it by the name of inhabitiveness.

Mr. Combe, and some other phrenologists, consider that this organ imparts the power of permanence not only to *place*, but in regard to *emotions and ideas*. And as such a permanence leads to the concentration of these emotions and ideas, the term CONCENTRATIVENESS has been applied to this organ.

This organ is small in the American Indians ; it is large in Negroes and Europeans.

The Scotch seem to have this feeling strong. Burns' poems contain frequent appeals to this feeling.

In Rogers's poems are some beautiful illustrations of the power of this attachment to home. One beautiful reference to the power of this feeling, as awakened by accidental impressions, is contained in the following lines :

The intrepid Swiss, that guards a foreign shore,
Condemned to climb his mountain cliffs no more,
If chance he hears the song so sweetly wild,
Which on those cliffs his infant hours beguiled,
Melts at the long lost scenes that round him rise,
And sinks a martyr to repentant sighs.†

The advantages resulting from such a power must be apparent to

* Marked No. 31.

† This song was the Ranz des Vaches ; of which song Rousseau writes in his Dictionary of Music. This air was so beloved by the Swiss, that it was forbidden for any one, under pain of death, (in France where the Swiss guards then existed) to play it ; because it made them weep, desert, and even die ; so strongly did it excite the desire to return home.

all. It gives a tie which binds each individual to the place of his nativity. It makes the Laplander love his barren scene : and the Esquimaux his dreary domain of ice and snow.

Its abuses are manifested when a morbid aversion to moving abroad exists : and when an individual will not leave his place, though duty should call him to go elsewhere.

“ Why is ‘home, sweet home,’ a song so generally agreeable ? What made the Canadian Indians, when once solicited to emigrate, to reply, ‘What! shall we say to the bones of our fathers, Arise, and go with us into a foreign land?’ What but the pleasure connected with the exercise of this faculty made cardinal Richelieu, when building his magnificent palace, on the site of the old family chateau at Richelieu, sacrifice the symmetry of the building in order to preserve the room in which he was born ? It is from the feeling of pleasure connected with the activity of this faculty, and of adhesiveness, that we feel admiration at the beautifully noble declaration of Ruth to Naomi, her mother-in-law, who, when about to return to her native country from Moab, the country of Ruth, requests Ruth to remain behind ; the attached girl states, ‘Entreat me not to leave thee, or to return from following thee : for to what *place* thou goest, I will go ; and in what *place* thou shalt lodge, I will lodge ; thy people is my people, and thy God, my God : for where thou shalt die, I will die, and there will I be buried : thus Jehovah will provide for me, and thus again : for death must divide between me and thee.’ Book of Ruth, i. 16, 17. from Bellamy’s translation.”

“ Perhaps there is no passage in any of the volumes in the Library of Entertaining Knowledge which contains more simple feeling than the following, referring to the hawthorn tree : a passage generally admired, the reason of which admiration being evidently the feeling of delight connected with the activity of INHABITIVENESS. ‘There is something about the old and gnarled hawthorn, which one bred in the country cannot soon forget, and which a visitor learns sooner than any association of placid delight connected with rural scenery. When, too, the traveller, or the man of the world, after a life spent in other pursuits, returns to the village of his nativity, the old hawthorn is the only playfellow of his boyhood that has not changed. His seniors are in the grave ; his contemporaries are scattered ; the hearths at which he found a welcome are in the possession of those who knew him not ; the roads are altered ; the houses rebuilt, and the common trees have grown out of his knowledge ; but, be it half a century or more, if man spare the old hawthorn, it is just the same—not a limb, hardly a twig, has altered from the picture that memory traces of his early years.’ ”*

This organ, acting with self-esteem, produces John Bullism’s love of country.

It is a curious fact, which Dr. Spurzheim was the first to notice, that the Saviour of mankind never gave a precept, “*Love your country.*”

* Horæ Phrenologicæ, Three Phrenological Essays. E. Palmer & Son, Paternoster Row.

If two oblique lines drawn outwards and downwards towards the ears from the organ last described, each one will lie on the next organ, namely,

*That of ADHESIVENESS.**

A lady was brought under the notice of Dr. Gall, who, more out of complaisance, than from any other feeling, took a cast of her head. To his great surprise, however, he found two protuberances in the situation of this organ, which he had never observed in any head he had previously examined.

He inquired of her friends her character, and found that she was well known as being a model of friendship: her attachment never varying whether in adversity or in prosperity, she having experienced many vicissitudes.

From this, and other observations, he was led to enquire whether friendship could be dependant upon any particular organ.

He was told that friendship arose from the conviction of our needs being supplied. In opposition to this, however, the fact at once suggested itself, that friendship often occurs without the perception of need, and further, friendship subsists between animals; tigers and dogs, lions and dogs, horses and dogs, have been known to live in friendship. In these cases the existence of need, and that need supplied, could not be present.

Dogs have been known to die on the tombs of their masters.

The existence of society is dependant, in a great measure, upon this organ, and its existence demonstrates that man is a *social* being. So are some animals: and those who live in society have an organization different from those that do not.

The existence of this organ is demonstrated by its diseased manifestations. Gall relates the case of a patient who was three times deranged: once at the death of a brother; a second time at the death of his father; and a third at the death of his mother.

Women have it larger than men: hence attachment on the part of women is more powerful than the same feeling on the part of men. The hysterical feeling, so common with delicately nerved women, seems to be dependant upon this organ. Men have hysterics. The Essayist had a friend, a very strong individual, who had an attack of hysterics on hearing of the death of his brother. He had very large adhesiveness. The greater strength of this feeling in women has never been referred to, perhaps, in words more beautiful, than those used by the royal bard of Israel, to indicate the love he bore to his friend Jonathan, on hearing of his death—"Distress is on me because of thee, my brother, Jonathan; thou wast exceedingly delightful to me: wonderful thy affection to me, *above the love of women.*" 2 Samuel i. 26.†

Individuals, who have this organ large, are very apt to form attachments, which often bring them into great trouble.

The feeling is blind, and does not guide to the proper objects on which the faculty ought to outgo.

* Marked No. 32.

† This is from Mr. Bellamy's invaluable translation of the Scriptures from the original Hebrew.

When friendships are formed from the activity of this, in conjunction with the lower feelings, misery very frequently results; since such friendships can be permanent only so long as the objects exciting the lower feelings exist; which exciting these feelings, awaken by their activity the organ of adhesiveness. Hence it is phrenologically true, that prosperity (which presents objects appealing to the lower feelings, and thereby excites adhesiveness,) brings friends; and adversity (which takes away these objects) tries them.

When friendships are formed upon the higher feelings they *must* be permanent, because the objects upon which they outgo are not subject to change: goodness remains goodness, conscientiousness remains as such, under every change of fortune.

*The organ next to be considered is that of PHILOPROGENITIVENESS.**

That a love of offspring exists generally in the animal creation cannot be disputed. That this must depend upon a power with which the Creator has endowed the various individuals, must appear evident also. Though these propositions appear true in themselves, few have attempted to ascertain the cause of the strong attachment subsisting between the parent and the progeny.

Dr. Gall, in examining the heads of different individuals, was struck with the fact that the heads of female animals are much larger than the heads of male animals, in the part situated immediately under the organ of inhabitiveness, on the central line already referred to: the largeness in the female head, giving a peculiar length to the female head in that particular direction.

Dr. Gall found many opinions respecting the cause of this difference, but could not arrive at any one, that would satisfactorily explain the facts.

At length, on one occasion, when engaged in lecturing, he was struck with the fact, that monkeys, that have this part of the head very large, are noted for the attachment they manifest toward young, more particularly to their young. It immediately occurred to his mind, may it not be possible that the attachment to offspring is dependant upon the existence and the development of this particular part of the brain. He followed out this idea, and the result was, a settled conviction that the portion of brain situated just above the little node, which exists on the lower central and posterior part of the head, is connected with love of offspring.

In favour of this organ and its functions more evidences can be adduced than for any other organ in the human head. Its site is so easily observed, and its development is generally striking.

The fact that this organ is larger in the female than the male, affords a pleasing testimony to the wisdom of the Creator: inasmuch as the female has all the arduous duties to perform in regard to bearing, attending to, and protecting the little object of helplessness.

Hence it happens that the male will, when pursued, desert the

* Marked No. 33.

young sooner than the female will. Hence it happens that female children are so fond of dolls, of dressing and undressing them; of combing and uncombing; of putting to bed at night; of taking them and caressing them; and similar practices.

Hence it happens that the Creator, when referring to the love that he bears to them who obey his commands, asks the question "*Can the mother forget her sucking child?*" Why should the Infinite have used this question, unless he knew that the strongest feeling he had implanted in the mother's head is the love of offspring.

The generally existing large development of this organ in the female head, and its consequent manifestation in the character, afford an explanation of another fact, namely, the feeling of disappointment when a woman appears destitute of this feeling. What unnatural mothers they appear.

This organ is often manifested in a *diseased* state, and women frequently become diseased in reference to this organ. Dr. Gall relates the case of a young lady who fancied herself to be pregnant with six children; and in her this organ was very large: also another case of a highly respectable, young, unmarried lady, who gave out that she was pregnant.

When men have it large they are very much attached to children, and children soon discover it.

Dr. Gall relates the curious fact, that, in twenty-six infanticides he examined, the organ was small. It is well to remember, however, that the want of this organ does not impel a mother to destroy her child, but renders her less able to resist those circumstances, which may act as temptations to effect the destruction.

Wordsworth's poetry is beautifully exhibitiv of the power of this feeling. Kotzebue also must have possessed this feeling strong. The following is a conversation held between the husband and the wife, Alonzo and Cora:—

"*Cora.* I am sure he will speak soon: then will be the last of the three holidays allowed by nature's sanction to the fond anxious mother's heart.

"*Alonzo.* What are those three?

"*Cora.* The extacy of his birth I pass: that in part is selfish: but when first the white blossoms of his teeth appear, breaking the crimson buds that did incase them; that is a day of joy: next when from his father's arms he runs without support, and clings, laughing and delighted, to his mother's knees; that—that is the mother's heart's next holiday; and sweeter still the third, whene'er his little stammering tongue shall utter the grateful sound of father, mother! O that is the dearest joy of all."

The power of this feeling, when awakened to activity by a female becoming a mother, is very beautifully portrayed by Dr. Reed:

"How common is it, to see a young woman in the gayest period of life, who has spent her days in mirth, and her nights in profound sleep, without solicitude or care, all at once transformed into the careful, the solicitous, the watchful nurse of her dear infant: doing nothing by day but gazing upon it, and serving it in the meanest

offices ; by night, depriving herself of sound sleep for months, that it may be safe in her arms. Forgetful of herself, her whole care is centred in this little object. Such a sudden transformation of her whole habits, and occupation, and turn of mind, if we did not see it every day, would appear a more wonderful metamorphosis *than any that Ovid has described.*"

When thought meets thought, ere from the lips it start,
And each warm wish springs mutual from the heart.

ESSAY XIII.

THE last organ belonging to the *animal propensities* is

*That of AMATIVENESS.**

The situation of this organ is easily recognized. It occupies the part of the back of the head, below the ridge which runs horizontal with the little projecting point referred to in the description of the site of philoprogeritiveness. When large, it produces the appearance commonly called bull-necked.

The organ of this particular feeling is, as it were, a separate brain. It is called the *cerebellum*. It is separated from the brain, called the *cerebrum*, constituting the organs already described, by a *membrane*, which is inserted on the inner surface of the skull into a ridge correspondent to the external ridge just referred to.

The fact of its *separation* from the rest of the brain is interesting, and may lead to some important conclusions. These may be noticed on another occasion.

There is another fact connected with this organ, which is its *relative size*. It is large in reference to the other organs of the brain.

Another fact connected with this organ is, that it is larger in the male than in the female : with which fact also some conclusions are connected.

Wherever sexes exist this organ exists.

The feeling given rise to by this organ is that of *sexual desire*.

Hippocrates was aware of this desire being dependant upon cerebral organization.

The organ, in its functional activity, is perfectly blind. It gives the impulse whenever the objects, suited to call it into activity, are present. And if no other organs existed in the human brain, vice could not be attached to its gratification. But there are other organs, and as this is the lowest organ in situation, the reflecting mind is taught the necessity of keeping its activity continually under the influence of the higher feelings ; and, at the same time, is convinced of the part which this affords to the foundation on which society, as composed of a succession of individuals, is dependant.

Much has been surmised as objectionable to this feeling : whereas, the Creator himself recognized it when he commanded the first parents of the human race, " Be fruitful and multiply, and replenish the earth : " a command which he repeated to Noah, when leaving the ark to descend upon a depopulated world.

This organ is to be viewed as productive of the feeling essential to the ensuring that condition of the human being, necessary for the production of his kind.

As the organ of physical love, it is the groundwork of some exalted

* Marked No. 34.

fabrics, domestic, moral, and intellectual. It affords a soil, which, if cultivated in accordance with the arrangement of the faculties as depicted in the human head, will produce the most genial fruits: if neglected, and directed by the other animal feelings, will produce the most horrible weeds.

To the existence of this organ is to be ascribed that peculiar sympathy, which no one can define, but which every one feels, existing between the sexes. Some may associate with this sympathy impurity, but there is a sympathy between the sexes quite independent of impurity: a sympathy, which makes the man instinctively recognize the woman as woman, and the woman the man as man: quite independent of the physical manifestation of the sexual difference in each.

Dr. Thomas Brown gives a beautiful and an accurate description of the influence of this feeling in its proper activity.

“ In considering the influences of this relation on human happiness, we are not to have regard merely to those emotions which are excited in the individuals who feel that exclusive delight in each others society, and that reciprocal admiration and confidence, the charm of which constitutes the moral part of what is called love. These feelings, indeed, are truly valuable in themselves, as a part of the happiness of the world, and would still be most valuable, even though no other beneficial influence were to flow from them. But precious as they are in this respect, we are not to regard them as extending only to the individuals themselves, and beginning and ceasing with their enjoyments. The chief value of this relation is diffused over all mankind. It is to be traced in that character of refinement which it has given to society, and with which love extends its delightful and humanizing influences, even to those who may pass through life, without feeling its more direct and immediate charms. It is in this respect, like that sunshine which even the blind enjoy, in the warmth which it produces, though they are incapable of distinguishing the light from which it flows.

“The system of gentler manners once produced in this way, may diffuse the influence in a great degree without a removal of the cause which gave rise to it; and yet, even at present, when men live long together without much intercourse with the gentler sex, we are soon able to discover some proof of the absence of that influence, which is necessary not only for raising man from savage life, but for saving him from relapsing into it.

“That the female character, however, may have its just influence, it is necessary that the female character should be respected. When woman is valued only as subservient to the animal pleasures of man, or to the multiplication of his race, there may be as much fondness as is involved in sensual profligacy, there might be a dreadful mixture of momentary tenderness with habitual tyranny and servility; but this is not love, and therefore not the moral influence of love—not that equal and reciprocal communication of sentiments and wishes

“ ‘ When thought meets thought ere from the lips it start,
And each warm wish springs mutual from the heart.’ ”

POPE.

To develop this peculiar sympathy, to improve this hallowed feeling, it is clear that woman should seek to be woman, and man to be man: woman not to be a white negro, to be the slave of the man, but to be a being who has all the same powers as the man; preponderance existing in reference to the domestic feelings, which, receiving a direction from the cultivated intellectual powers, will impart a truly classic beauty to those refined associations connected with the domestic circle, that will again realize the picture of the poet, who represented even Eden as a wild, until the lovely woman smiled.

The existence of this feeling affords presumptive evidence against the practice of celibacy; since celibacy is evidently a violation of this faculty.

It is true, many individuals may decide to live alone, as well as to live not united with an object of affection belonging to the opposite sex; and such decision may have been induced by the highest motive. Still they have submitted to a violation of a feeling, which is natural, because, in the condition of society existing in regard to them, they could not fulfil a higher duty in attending to this, a natural one. Thus, an affectionate daughter may, out of regard to the happiness of an aged parent, nobly resolve to sacrifice the gratification connected with this feeling, in order that she may be enabled to continue that care and that tenderness to her parents, which she, in a married state, might not be able to supply. So with a son in reference to his mother.

But a life of celibacy is maintained as a principle by the Romish clergy. Such a dogma is a curse to society, and it may be well to examine it.

The existence of the organ of amativeness at once demonstrates its unnaturality. If our feelings had originated in the influences of education, if they were producible and preventible by education, then some excuse might be obtained for a celibatic life. But as phrenology demonstrates that there is a feeling of physical love: a feeling, demonstrated to exist by a physical organ, it, at the same time, proves that such a dogma, as, that men ought, as a body, to live a celibatic life, is false.

All false views are injurious: and, as an evidence, the fact stands prominent, that never were greater vices, in reference to the abuse of this feeling, committed by any body of men, than those by the Romish clergy. The very circumstance of professing celibacy induced the unsuspecting to make, at the confessional, acknowledgments which otherwise they would not, and thus craft obtained materials by which to effect the basest purposes.

And it is quite easy to understand why this celibatic state should be productive of such evils. To be a true celibatic, the feeling connected with the organ under discussion must be destroyed. If it be not, it will strive to gain activity: and finding all the legitimate avenues shut, it must necessarily seek other avenues. Vice must prosper under such restraints: stolen waters are sweet.

And hence can be explained the consentaneousness of appearance of nunneries with monasteries.

The nunneries, every person who has read the history of France before the first French Revolution, must be aware were the *libertinage mansions of priests*.

It is true much may be said in favour of these institutions, although all the arguments for them may be easily overturned. Yet the one argument, the existence of the organ of physical love, at once overturns every argument, however apparently well founded.

It is true that men exist who are so deficient in this feeling, that they may be said to be "eunuchs from the womb." Such men cannot judge of men as commonly organized in reference to this organ, any more than an individual with deficient ideality, can judge of the state of mind of an individual endowed with large ideality.

Such, then, is a brief abstract of the various organs which the labours of phrenologists have discovered. Such are the functions which have been attached to these organs: and being such, it is hoped, that an acquaintance with the same will be attended with those uses, which the old saying, that "self-knowledge is the highest of all knowledges," implies ought to be connected therewith: those uses, the importance of which is exhibited in the fact, that the philosopher who gave birth to the saying, "know thyself," was reckoned among the wise men of Greece.

ESSAY XIV.

BESIDES the knowledge of the organs and their functions, it is necessary, for the formation of a correct phrenological judgment, to attend to other matters. It is necessary to be aware of the differences between intensity and power of action, already pointed out in the third Essay: and, as intimately connected with the differences referred to, the doctrine of TEMPERAMENTS requires investigation.

To understand this doctrine is more particularly necessary, because so many of the intellectual, moral, and animal tendencies have been ascribed to the temperaments, that, it would seem, from the observation of some acute-minded men, that the differences in temperament constitute the causes of all the differences in character among mankind.

To avoid the error of ascribing too much, and the equal error of ascribing too little, to the temperaments, it seems advisable to make them, on the present occasion, a concluding subject of investigation.

Every human being is composed of the same parts, allowing for the difference in the sexes: yet no two human beings exactly agree. The features are different; so, that, while each person has the same organs, he has, at the same time, some circumstances modifying each organ. These modifications constitute his individuality.

In regard to the *general* constitution, general modifications exist: and these general modifications are called *temperaments*. In other words, take four healthy men, the parts of their bodies are in the conditions essential to health; and in this respect they all are alike; but yet each man has these parts modified by constitutional conditions.

Such modifications are now to be considered. They are generally regarded as four, the

Sanguineous;
Melancholic;
Choleric or bilious; and
Phlegmatic.

The indications of these, individually, may now be pointed out: it being remembered that these terms were given on account of the notions entertained by some of the ancients respecting the effect of the state of the fluids on the disposition: in reference to the bile, melancholic meaning *black bile*: choleric, yellow bile: and in reference to the blood, the term sanguineous occurs.

Blumenbach remarks, the sanguineous is excited most readily, but slightly; the choleric, readily and violently; the melancholic, slowly but permanently; and the phlegmatic, most slowly, indeed, with difficulty.

The *habit*: of the sanguineous is full; of the melancholic, spare;

of the choleric, between the two; of the phlegmatic, lax, often plump.

The *skin*: of the sanguineous is delicate, and fine in texture; of the melancholic, dark and hairy; of the choleric, between both; of the phlegmatic, pale and destitute of hair, often thick.

The *hair*: of the sanguineous, light and varied; of the melancholic, black, and eyes also: of the choleric, between; of the phlegmatic, very light upon the head.

The *pulse*: of the sanguineous, quick; of the choleric, quick and strong: of the melancholic, slow: of the phlegmatic, slow and weak.

The *fibre*: of the sanguineous, soft, with large veins; of the choleric, less soft; of the melancholic, firm; of the phlegmatic, weak.

The choleric or bilious temperament, seems to be most intimately connected with the attainment of first rate excellence.

To these temperaments the *nervous* may be added.

This is associated with great activity of the mental powers: an activity not attended, however, with continuance. Individuals of a nervous temperament, have great susceptibility of excitement. The characteristics of this temperament, as given by Mr. Noble, are "a soft skin: fair and thin hair: sometimes a paleness of the complexion, and sometimes a hectic tinge: small and soft muscles: delicacy of the whole organization: generally a slenderness of form: a sparkling vivacity of the transparent part of the eye, and a quick sharp pulse."

Henry Kirke White, Mr. Noble refers to, as a striking instance of this temperament.

Precocious children belong to this division. They are soon excited to action: foolish parents favour this easy excitation: they die, and then the parents are consoled because they *were too good for this world*: whereas the fact is, that the folly of parents prevented them living to do good in this world.

These temperaments, though occasionally presented distinct, are generally more or less connected together. The sanguine is most frequently mixed with the bilious, the bilious with the nervous, and the sanguine with the lymphatic.

From these statements it will not be difficult to judge, how far these temperaments are influential. The error in connection with their influence, is, that they have been supposed to produce *dispositions and intellectual powers*, and not merely the *MODES OF ACTIVITY of dispositional tendencies*, and of *intellectual power*.

This notice of temperaments may be concluded by a description, referring to the choice of a wife, by a writer who possessed a great command of the English language. "Who is to tell whether a girl will make an industrious woman? How is the poor blind lover especially to be able to ascertain whether she, whose smiles, and dimples, and bewitching lips, have half bereft him of his senses: how is he to be able to judge, from any thing that he can see, whether the beloved object will be industrious or lazy? Why, it is very difficult," he answers. "There are, however, certain outward

signs, which, if attended to with care, will serve as pretty sure guides. And, first, if you find the *tongue* lazy, you may be nearly certain that the hands and the feet are the same. By laziness of the tongue I do not mean *silence*: I do not mean an *absence of talk*, for that is, in most cases, very good: but I mean a *slow* and *soft utterance*: a sort of *sighing out* of the words, instead of *speaking* them: a sort of letting the sounds fall out, as if the party were sick at stomach. The pronunciation of an industrious person, is generally quick and distinct, and the voice, if not strong, firm at least. Not masculine: as feminine as possible: not a croak or a bawl, but a quick, distinct, and sound voice." "Look a little, also, at the labours of the *teeth*, for these correspond with the other members of the body, and with the operations of the mind, 'quick at meals, quick at work,' is a saying as old as the hills in this, the most industrious nation upon earth, and never was there a truer saying." "Get to see her at work upon a mutton chop, or a bit of bread and cheese; and if she deal quickly with these, you have a pretty good security for that activity, that stirring industry, without which a wife is a burden instead of a help." "Another mark of industry is a *quick step*, and a somewhat heavy tread, showing that the foot comes down with a hearty good will." "I do not like, and I never liked, your sauntering, soft-stepping girls."*

It is to be remembered, therefore, that the temperament does not produce the dispositional tendencies; temperament modifies manifestation.

Another circumstance, to be taken into consideration in forming a phrenological judgment, is the influence of education and of external circumstances. The positive influences of these upon organization, and activities of the faculties, will be considered on another occasion. It is right to remind the phrenological student, that he should keep his eye upon these in making his conclusions from any specific organization.

* Cobbett's Advice to Young Men, Letter III.

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